

SEQUENCE LISTING

-1-
IP20 Rec'd PCT/PTO 21 APR 2006

<110> Bayer, AG

<120> METHODS AND COMPOSITIONS FOR THE PREDICTION, DIAGNOSIS, PROGNOSIS,
PREVENTION AND TREATMENT OF MALIGNANT NEOPLASIA

<130> BHC031051

<160> 512

<170> PatentIn version 3.1

<210> 1

<211> 3846

<212> DNA

<213> Homo sapiens

<400> 1
gcctcccgcc agctcgccctc ggggaacagg acgcgcgtga gctcagggct ccccgcccca 60
gctttttctcg gaaccatgaa ccccaactgc gcccggtgcg gcaagatcgt gtatcccacg 120
gagaagggtga actgtctgga taagttctgg cataaagcat gcttccattg cgagacctgc 180
aagatgacac tgaacatgaa gaactacaag ggctacgaga agaagcccta ctgcaacgca 240
cactacccca agcagtcctt caccatgggt gcggacaccc cgaaaaacct tcgcctcaag 300
caacagagtg agctccagag tcaggtgcgc tacaaggagg agtttgagaa gaacaagggc 360
aaagggtttca gcgtagtggc agacacgccc gagctccaga gaatcaagaa gaccaggac 420
cagatcagta atataaaata ccatgaggag tttgagaaga gccgcatggg ccctagcggg 480
ggcgagggca tggagccaga gcgtcgggat tcacaggacg gcagcagcta ccggcggccc 540
ctggagcagc agcagcctca ccacatccc accagtgcgc cggtttacca gcagccccag 600
cagcagccgg tggcccagtc ctatgggtggc tacaaggagc ctgcagcccc agtctccata 660
cagcgcagcg ccccagggtg tggcggaag cggtaccgcg cggtgtatga ctacagcgcc 720
gccgacgagg acgaggtctc cttccaggac ggggacacca tcgtcaacgt gcagcagatc 780
gacgacggct ggatgtacgg gacgggtggag cgcaaccggc acacggggat gctgccggcc 840
aactacgtgg aggccatctg aaccgggagc gccccatct gtcttcagca cattccacgg 900
catcgcatcc gtccctggcg tgagccgtcc attcttcagt gtctctgttt tttaaaacct 960
gcgacagctt gtgattccta cccctcttcc agcttctttt gccaaactgaa gccttcttct 1020
gccacttctg cgggctccct cctctggcag gcttcccccg tgatcgactt cttgggtttc 1080
tctctggatg gaacgggtat gggcctctct gggggaggca gggctggaat gggagacctg 1140
ttggcctgtg ggccctacat cccctctgt tctctccct cacatccctc tgcccagctc 1200
ctcacatacc cacacattcc agggctgggg tgagcctgac tgccaggacc ccaggtcagg 1260
ggctccctac attccccaga gtgggatcca cttcttggtt cctgggatgg cgatggggac 1320
tctgccgctg ttaggggacc agtgggatgg gctctacctc tctttctcaa agagggggct 1380
ctgccacctg ggggtctctc tccctacctc cctctcagg ggcaacaaca ggagaatggg 1440
gttccctgtg tggggcgaat tcatccctc cccgcgcgtt ccttcgcaca ctgtgatttt 1500
gccctctgc ccacgcagac ctgcagcggg caaagagctc ccgaggaagc acagcttggg 1560
tcaggttctt gcctttctta attttaggga cagctaccgg aaggaggggg acaaggagtt 1620
ctcttccgca gcccctttcc ccacgcccac cccagctctc cagggaccct tgccctgcctc 1680
ctaggctgga agccatggtc ccgaagtgtg gggcaagggt gcctcaggac cttttgggtc 1740
tcagcctcgc tcagcccca ggatctgggt taggtggcgc ctctccctg ctctcatgg 1800

gaagatgtct	cagagccttc	catgacctcc	cctccccagc	ccaatgccaa	gtggacttgg	1860
agctgcacaa	agtcagcagg	gaccactaaa	tctccaagac	ctggtgtgcg	gaggcaggag	1920
catgtatgtc	tgaggtgtgc	tgacacgcaa	gtgtgtgagt	gtgagtgtga	gagatggggc	1980
gggggtgtgt	ctgtaggtgt	ctctgggcct	gtgtgtgggt	gggttatgt	gagggatatga	2040
agagctgtct	tcccttgaga	gtttcctcag	aaccacacag	gagaggggag	ggctcctggg	2100
gcagagaagt	tccttaggtt	ttctttggaa	tgaatttcct	ccttcccccc	atctctgagt	2160
ggaggaagcc	caccaatctg	ccctttgcag	tgtgtcaggg	tgaaggtaa	gaggttggtg	2220
tggagtttgg	gtgccatag	ggtctgcagc	ctgctggggc	taagcgggtg	aggaaggctc	2280
tgtcactcca	ggcatatgtt	tccccatctc	tgtctggggc	tacagaatag	ggtggcagaa	2340
gtgtcaccc	gtgggtgtct	ccctcggggg	ctcttcccc	agacctcccc	ctcacttaca	2400
taaagctccc	ttgaagcaag	aaagagggtc	ccagggtctg	aaaactggaa	gcacagcctc	2460
gggatgggg	agggaaagac	ggtgctatat	ccagttcctg	ctctctgctc	atgggtgggt	2520
gtgacaaccc	tggcctcact	tgattcatct	ctggttttct	tgccaccctc	tgggagttcc	2580
catcccat	tcactcctgag	cccaaccagg	ccctgccatt	ggcctcttgt	cccttggcac	2640
acttgtaccc	acaggtgagg	ggcaggacct	gaaggtattg	gcctgttcaa	caatcagtc	2700
tcatgggtgt	ttttgtcaac	tgcttgtaa	ttgatttggg	gatgtttgcc	ccgaatgaga	2760
ggttgaggaa	aagactgtgg	gtggggaggc	cctgcctgac	ccatcccttt	tcctttctgg	2820
ccccagccta	ggtggaggca	agtgggaatat	cttatattgg	gcgatttggg	ggctcgggga	2880
ggcagagaat	ctcttggggag	tcttgggtgg	cgctggtgca	ttctgtttcc	tcttgatctc	2940
aaagcacaa	gtggatttgg	ggaccaaaag	tcagggacac	atcccccttag	aggacctgag	3000
tttgggagag	tgggtgagtgg	aagggaggag	cagcaagaag	cagcctgttt	tcactcagct	3060
taattctcct	tcccagataa	ggcaagccag	tcattggaatc	ttgtgcagg	ccctccctct	3120
actcttcctg	tcctaaaaat	aggggcccgt	ttcttacaca	ccccagaga	gaggagggac	3180
tgtcacactg	gtgctgagtg	accgggggct	gctggggcgt	tgttctttac	caaaaccatc	3240
catccctaga	agagcacaga	gccctgaggg	gctgggctgg	gctgggctga	gccctgggtc	3300
ttctctacag	ttcacagagg	tctttcagct	cattttaatc	caggaaagag	gcacaaagc	3360
tagaatgtga	atataacttt	tgtgggcaaa	tactaagaat	aacaagaagc	ccagtgggtga	3420
ggaaagtgcg	ttctcccagc	actgcctcct	gttttctccc	tctcatgtcc	ctccagggaa	3480
aatgacttta	tgtcttaatt	tctgcctttc	ccccctcaca	catgcacttt	tgggcctttt	3540
tttatagctg	gaaaaaacia	aataaccacc	tacaaacctg	tatttaaaaa	gaaacagaaa	3600
tgaccacgtg	aaatttgcct	ctgtccaaac	atctcatccg	tgtgtatgtg	tatgtgtgtg	3660
agtgtgtgaa	gccgccagtt	catcttttta	tatgggggtg	ttgtctcatt	ttggtctgtt	3720
ttggtccctc	ccctcgtggg	cttgtgctcg	ggatcaaac	ttcttgccct	gttatgatcc	3780
tgaacatttg	acttgaacca	caagtgaatc	tttctcctgg	tgactcaaat	aaaagtataa	3840
ttttta						3846

<210> 2

<211> 1711

<212> DNA

<213> Homo sapiens

<400> 2

gaggggaaggc	aggaaggagg	cagccgaagg	ccgagctggg	tggctggacc	gggtgctggc	60
tgcgcgcgct	gcttttcggc	cccacggcct	ctcccatgcg	ctgagggagc	ccggctgcgg	120
gccggcgggcg	ggaggggagg	ctcctctcca	tggctccagaa	gaccagcatg	tcccggggcc	180
cttaccacc	ctcccaggag	atcccatgg	aggctcttcca	ccccagccc	caggcgaat	240
acagcaagag	gaaagggcga	ttcaaacggt	cagatgggag	cacgtcctcg	gataccacat	300
ccaacagctt	tgtccgccag	ggctcagcgg	agtcctacac	cagccgtcca	tcagactctg	360
atgtatctct	ggaggaggac	cgggaagcct	taaggaagga	agcagagcgc	caggcattag	420
cgcagctcga	gaaggccaag	accaagccag	tggcatttgc	tgtgcggaca	aatgttggct	480
acaatccgtc	tccaggggat	gaggtgcctg	tgcaggaggt	ggccatcacc	ttcgagccca	540
aagacttcct	gcacatcaag	gagaaataca	ataatgactg	gtggatcggg	cggctggtga	600
aggagggctg	tgaggttggc	ttcattccca	gccccgtcaa	actggacagc	cttcgcctgc	660
tgcaggaaca	gaagctgcgc	cagaaccgcc	tgggtccag	caaatcaggc	gataactcca	720
gttccagtct	gggagatgtg	gtgactggca	cccgcgcgcc	cacacccctc	gccagtgcga	780
aacagaagca	gaagtcgaca	gagcatgtgc	ccccctatga	cgtgggtgct	tccatgaggc	840
ccatcatcct	ggtgggaccg	tcgctcaagg	gctacgaggt	tacagacatg	atgcagaaag	900
ctttatttga	cttcttgaag	catcggtttg	atggcaggat	ctccatcact	cgtgtgacgg	960
cagatatttc	cctggctaag	cgctcagttc	tcaacaaccc	cagcaaacac	atcatcattg	1020
agcgtcccaa	cacacgctcc	agcctggctg	aggtgcagag	tgaatcgag	cgaatcttcc	1080
agctggcccg	gacccttcag	ttggctcgtc	tggatgctga	caccatcaat	ccccagccc	1140
agctgtccaa	gacctcgtg	gccccatca	ttgtttacat	caagatcacc	tctcccaagg	1200

tacttcaaag	gctcatcaag	tcccaggagaa	agtctcagtc	caaacacctc	aatgtccaaa	1260
tagcggcctc	ggaaaagctg	gcacagtgcc	cccctgaaat	gtttgacatc	atcctggatg	1320
agaaccaatt	ggaggatgcc	tgcgagcatc	tggcggagta	cttgggaagcc	tattggaagg	1380
ccacacaccc	gcccagcagc	acgccaccca	atccgctgct	gaaccgcacc	atgggtaccg	1440
cagccctgcg	ccgtagccct	gcccctgtct	ccaacctcca	ggtacagggtg	ctcacctcgc	1500
tcaggagaaa	cctcggcttc	tggggcgggc	tggagtcttc	acagcggggc	agtgtggtgc	1560
cccaggagca	ggaacatgcc	atgtagtggg	cgcctgccc	gtcttccctc	ctgctctggg	1620
gtcggaaactg	gagtgcaggg	aacatggagg	aggaaggga	gagctttatt	ttgtaaaaaa	1680
ataagatgag	cggcaaaaaa	aaaaaaaaaa	a			1711

<210> 3

<211> 698

<212> DNA

<213> Homo sapiens

<400> 3

ttttcctttc	gctgctgctg	ccgcagccat	gagtatgctc	aggcttcaga	agaggctcgc	60
ctctagtgtc	ctccgctgtg	gcaagaagaa	ggctctggta	gacccaatg	agaccaatga	120
aatcgccaat	gccaaactcc	gtcagcagat	ccggaagctc	atcaaagatg	ggctgatcat	180
ccgcaagcct	gtgacggctc	attcccgggc	tcgatgccgg	aaaaacacct	tggcccgcgc	240
gaagggcagg	cacatgggca	taggtaagcg	gaaggtaca	gccaatgcc	gaatgccaga	300
gaaggtcaca	tggatgagga	gaatgaggat	tttgcccgcc	ctgctcagaa	gataccgtga	360
atctaagaag	atcgatcgcc	acatgtatca	cagcctgtac	ctgaagggtga	aggggaatgt	420
gttcaaaaac	aagcggattc	tcatggaaca	catccacaag	ctgaaggcag	acaaggcccg	480
caagaagctc	ctggctgacc	aggctgaggg	ccgcaggctc	aagaccaagg	aagcacgcaa	540
gcgcctgtaa	gagcgccctc	aggccaagaa	ggaggagatc	atcaagactt	tatccaagga	600
ggaagagacc	aagaaataaa	acctcccact	ttgtctgtac	atactggcct	ctgtgattac	660
atagatcagc	cattaaaata	aaacaagcct	taatctgc			698

<210> 4

<211> 5810

<212> DNA

<213> Homo sapiens

<400> 4

gggaagatgg	cggcggcctc	gagcacccctc	ctcttctttgc	cgcgggggac	ttcagattga	60
tccttcccgc	gaagagttagg	gactgtctgg	gccttgctgc	ccgggatccc	gagccaactt	120
gtttcctccg	ttagtgggtg	ggaaggcctt	atccttttgt	ggcggatcta	gcttctcctc	180
gccttcagga	tgaagctca	ggggggaaac	cgaggagtca	gaaaagctga	gtaagatgag	240
ttctctcctg	gaacggctcc	atgcaaaatt	taaccaaaat	agaccctgga	gtgaaaccat	300
taagcttgtg	cgtcaagtca	tggagaagag	ggttgtgatg	agttctggag	ggcatcaaca	360
tttggtcagc	tgtttggaga	cattgcagaa	ggctctcaaa	gtaacatctt	taccagcaat	420
gactgatcgt	ttggagtcca	tagcaggaca	gaatggactg	ggctctcatc	tcagtgccag	480
tggcactgaa	tgttacatca	cgtcagatat	gttctatgtg	gaagtgcagt	tagatcctgc	540
aggacagctt	tgtgatgtaa	aagtggctca	ccatggggag	aatcctgtga	gctgtccgga	600
gcttgtacag	cagctaaggg	aaaaaaattc	tgatgaattt	tctaagcacc	ttaagggcct	660
tgtaaatctg	tataaccttc	caggggacaa	caaactgaag	actaaaatgt	acttggctct	720
ccaatcctta	gaacaagatc	tttctaataat	tactggaaag	caactaatgc		780
tggctccttg	gataagattc	ttcatggaag	tgttggctat	ctcacaccaa	ggagtggggg	840
tcatttaattg	aacctgaagt	actatgtctc	tccttctgac	ctactggatg	acaagactgc	900
atctcccac	atcttgcagt	agaataatgt	ttctcgatct	ttgggcattga	atgcatcagt	960
gacaattgaa	ggaacatctg	ctgtgtacaa	actcccaatt	gcaccattaa	ttatggggctc	1020
acatccagtt	gacaataaat	ggacccttcc	cttctcctca	atcaccagtg	ccaactagtg	1080
tgatcttctc	gcctgtttct	tcttgaaatt	tccccagcca	atcccagtat	ctagagcatt	1140
tggtcagaaa	ctgcagaact	gcacaggaat	tccattgttt	gaaactcaac	caacttatgc	1200
acccctgtat	gaactgatca	ctcagtttga	gctatcaaa	gaccctgacc	ccataccttt	1260
gaatcacaac	atgagatttt	atgctgctac	tcctggctcag	cagcactgct	atttctccta	1320
caaggatgct	cctcttccag	atggccgaag	tctacaggga	accttgttta	gcaaaatcac	1380

ctttcagcac	cctggccgag	ttcctcttat	cctaaatctg	atcagacacc	aagtggccta	1440
taaacaccctc	attggaagct	gtgtcaaaag	aactattctg	aaagaagatt	ctcctgggct	1500
tctccaattt	gaagtgtgtc	ctctctcaga	gtctcgtttc	agcgtatctt	ttcagcaccc	1560
tgtgaatgac	tccctgggtg	gtgtggtaat	ggatgtgcag	ggcttaacac	atgtgagctg	1620
taaactctac	aaagggctgt	cggatgcact	gatctgcaca	gatgacttca	ttgccaaggt	1680
tgttcaaaga	tgtatgtcca	tccctgtgac	gatgagggtc	attcggagga	aagctgaaac	1740
cattcaagcc	gacaccccag	cactgtccct	cattgcagag	acagttgaag	acatggtgaa	1800
aaagaacctg	cccccggtc	gcagcccagg	gtatggcatg	accacaggca	acaacccaat	1860
gagtgggtacc	actacatcaa	ccaacacctt	tccggggggg	cccattgcca	ccttgtttaa	1920
tatgagcatg	agcatcaaag	atcggcatga	gtcgggtggg	catggggagg	acttcagcaa	1980
gggtgtctcag	aacccaattc	ttaccagttt	gttgcaaatc	acagggaaag	gggggtctac	2040
cattggctcg	agtcggaccc	ctcctcatca	cacgcgcaca	cctgtctctt	cgatggccgg	2100
caacaccaag	aaccacccga	tgtctcatgaa	ccttctcaaa	gataatcctg	ccaggatttt	2160
ctcaacccct	tatggaagca	gccctttaga	aaggcagaac	tcctcttccg	gctcaccccg	2220
catggaaata	tgtctgggga	gcaacaagac	caagaaaaag	aagtcaccaa	gattaccacc	2280
tgagaaacca	aagcaccaga	ctgaagatga	ctttcagagg	gagctatttt	caatggatgt	2340
tgactcacag	aaccctatct	ttgatgtcaa	catgacagct	gacacgctgg	atacgccaca	2400
catcactcca	gctccaagcc	agtgtagcac	tcccccaaca	acttaccacc	aaccagtacc	2460
tcacccccaa	cccagtatct	aaaggatggt	ccgactatcc	agttcagaca	gcattggccc	2520
agatgtaact	gacatccttt	cagacattgc	agaagaagct	tctaaacttc	ccagcactag	2580
gagtacttgc	ccagccattg	gcacccctct	tcgagattct	tcaagctctg	ggcattctca	2640
gagtaccctg	tttgactctg	atgtctttca	aactaacaat	aatgaaaatc	catacactga	2700
tccagctgat	cttattgcag	atgctgtctg	aagccccagt	agtgactctc	ctaccaatca	2760
tttttttcat	gatggagtag	atttcaatcc	tgattttattg	aacagccaga	gccaaagtgg	2820
ttttggagaa	gaatatcttg	atgaaagcag	ccaaagtggg	gataatgatg	atttcaaagt	2880
atttgcattct	caggcactaa	atactttggg	gttgccaatg	cttggagggtg	ataattggga	2940
gaccaagttt	aagggcaata	accaagccga	cacagttgat	ttcagtatta	tttcagtagc	3000
cggcaaagct	ttagctcctg	cagatcttat	ggagcatcac	agtggtagtc	agggctcctt	3060
actgaccact	ggggacttag	ggaaagaaaa	gactcaaaag	agggtaaagg	aaggcaatgg	3120
caccagtaat	agtactctct	cggggcccgg	attagacagc	aaaccaggga	agcgcagctc	3180
gaccccttct	aatgatggga	aaagcaaaaga	taagcctcca	aagcggaaaga	agcgagacac	3240
tgagggaaag	tctccatctc	atagttcttc	taacagacct	tttaccacc	ctaccagtac	3300
aggtggatct	aaatcgccag	gcagtgcagg	aagatctcag	actccccag	gtgttgccac	3360
accacccatt	cccaaaatca	ctattcagat	tcctaaggga	acagtgatgg	tgggcaagcc	3420
ttcctctcac	agtcagtata	ccagcagtgg	ttctgtgtct	tcctcaggca	gcaaaagcca	3480
ccatagccat	tcttccctct	cttctctatc	tgcttccacc	tcagggaaga	tgaaaagcag	3540
taaatcagaa	ggttcatcaa	gttccaagtt	aagtagcagt	atgtattcta	gccaggggtc	3600
ttctggatct	agccagtcca	aaaattcatc	ccagtctggg	gggaagccag	gctcctctcc	3660
cataaccaag	catggactga	gcagtggctc	tagcagcacc	aagatgaaac	ctcaaggaaa	3720
gccatcatca	cttatgaatc	cttctttaag	taaaccaaac	atatccctt	ctcattcaag	3780
gccacctgga	ggctctgaca	agcttgcttc	tcacaaatga	cctgttctctg	gaactcctcc	3840
atcctctaaa	gccaaagtccc	ctatcagttc	aggttctggg	ggttctcata	tgtctggaac	3900
tagttcaagc	tctggcatga	agtcattctc	agggttagga	tcctcagggt	cgttgtccca	3960
gaaaactccc	ccatcatcta	attcctgtac	ggcatcttcc	tcctcctttt	cctcaagtgg	4020
ctcttccatg	tcattctctc	agaaccagca	tgggaattct	aaaggaaaat	ctcccagcag	4080
aaacaagaag	ccgtccttga	cagctgtcat	agataaaactg	aagcatgggg	ttgtccacag	4140
tgggcctggg	ggtgaagacc	cactggacgg	ccagatgggg	gtgagcacia	attcttccag	4200
ccatcctatg	tcctccaaac	ataacatgtc	aggaggagag	tttcagggga	agcgtgagaa	4260
aagtgataaa	gacaaatcaa	aggtttccac	ctccgggagt	tcagtggatt	cttctaagaa	4320
gacctcagag	tcaaaaaatg	tggggagcac	aggtgtggca	aaaattatca	tcagtaagca	4380
tgatggaggc	tccctagca	ttaaagccaa	agtgaacttg	cagaaacctg	gggaaagtag	4440
tgagagaagg	cttaggcctc	aaatggcttc	ttctaaaaac	tatggctctc	cactcatcag	4500
tggttccact	ccaaagcatg	agcgtggctc	tcccagccat	agtaagtcac	cagcatatac	4560
cccccagaat	ctggacagtg	aaagtgaagc	aggtcctctc	atagcagaga	aatcttatca	4620
gaatagtccc	agctcagacg	atgggtatccg	accacttcca	gaatacagca	cagagaaaca	4680
taagaagcac	aaaaaggaaa	agaagaaagt	aaaagacaaa	gatagggaac	gagaccggga	4740
caaagaccga	gacaagaaaa	aatctcatag	catcaagcca	gagagttggg	ccaaatcacc	4800
catctcttca	gaccagtcc	tgtctatgac	aagtaacaca	atcttatctg	cagacagacc	4860
ctcaaggctc	agcccagact	ttatgattgg	ggaggaagat	gatgatctta	tggatgtggc	4920
cctgattggg	aattaggaac	cttatttctc	aaaagaaaca	ggggcagagg	aaaaaaact	4980
attgataagt	ttataggcaa	accaccataa	gggggtgagtc	agacaggtct	gatttgggta	5040
agaatcctaa	atggcatggc	tttgacatca	agctgggtga	attagaaagg	catatccaga	5100
ccctattaaa	gaaaccacag	ggtttgatcc	tgggttaccag	gaagtcttct	ttgttctctg	5160
gccagaaaaga	aagttaaaat	acttgcctaa	gaaagggagg	gggggtgggag	gggtgtaggg	5220
agaggggaagg	gagggaagaa	gttttggggg	aatatttcat	atatattttc	ttctcccttt	5280
ttccattttt	aggccatggt	ttaaactcat	tttagtgcac	gtatatgaag	ggctggggcag	5340

aaaatgaaaa	agcaatacat	tccttgatgc	atttgcata	aggttgttca	actttgtttg	5400
aggtagttgt	ccgtttgagt	catgggcaaa	tgaaggactt	tggtcatttt	ggacacttaa	5460
gtaatgtttg	gtgtctgttt	cttaggagtg	actgggggag	ggaagattat	tttagctatt	5520
tatttgaat	attttaaccc	tttatctgtt	tgtttttata	cagtgtttcg	ttctaaatct	5580
atgaggttta	gggttcaaaa	tgatggaagg	ccgaagagca	aggcttatat	ggtggtaggg	5640
agcttatagc	ttgtgctaata	actgtagcat	caagcccaag	caaattagtc	agagcccgcc	5700
tttagagtta	aataataatg	aaaaacccaa	atgatatttt	tatttttagga	gggtttaaat	5760
agggttcaga	gatcatagga	atattaggag	ttacctctct	gtggaggtat		5810

<210> 5

<211> 5515

<212> DNA

<213> Homo sapiens

<400> 5

cttttttccc	ttcttcaggt	caggggaaag	ggaatgccc	attcagagag	acatgggggc	60
aagaaggacg	ggagtggagg	agcttctgga	actttgcagc	cgtcatcggg	aggcggcagc	120
tctaacagca	gagagcgtca	ccgcttggtg	togaagcaca	agcggcataa	gtccaaacac	180
tccaaagaca	tggggttggt	gacccccgaa	gcagcatccc	tgggcacagt	tatcaaactc	240
ttggtggagt	atgatgatat	cagctctgat	tccgaçacct	tctccgatga	catggccttc	300
aaactagacc	gaagggagaa	cgacgaacgt	cgtggatcag	atcggagcga	ccgcctgcac	360
aaacatcgtc	accaccagca	caggcggttc	cgggacttac	taaaagctaa	acagaccgaa	420
aaagaaaaaa	gccaagaagt	ctccagcaag	tccggatcga	tgaaggaccg	gatatacgga	480
agttcaaagc	gttcgaatga	ggagactgat	gactatggga	aggcgcaggt	agccaaaagc	540
agcagcaagg	aatccaggtc	atccaagctc	cacaaggaga	agaccaggaa	agaacgggag	600
ctgaagtctg	ggcacaaga	ccggagtaaa	agtcacgaa	aaagggaaac	acccaaaagt	660
tacaaaacag	tggacagccc	aaaacggaga	tccaggagcc	cccacaggaa	gtggtctgac	720
agctccaaac	aagatgatag	cccctcggga	gcttcttatg	gccaaagatta	tgaccttagt	780
ccctcacgat	ctcatacctc	gagcaattat	gactcctaca	agaaaagtcc	tggaaagtacc	840
tcgagaaggc	agtcgggtcag	tcccccttac	aaggagcctt	cggcctacca	gtccagcacc	900
cggtcaccga	gccccctacag	tagggcgacag	agatctgtca	gtccctatag	caggagacgg	960
tcgtccagct	acgaaagaag	tggctcttac	agcgggcgat	cgcccagtc	ctatggctga	1020
aggcgggtcca	gcagcccttt	cctgagcaag	cggctctcga	gtcggagtc	actccccagt	1080
aggaaatcca	tgaagtccag	aagtagaagt	cctgcataat	caagacattc	atcttctcat	1140
agtaaaaaga	agagatccag	ttcacgcagt	cgtcattcca	gtatctcacc	tgtcaggctt	1200
ccacttaatt	ccagtctggg	agctgaactc	agtaggaaaa	agaaggaaa	agcagctgct	1260
gctgctgcag	caaagatgga	tggaaaggag	tccaagggtt	caoctgtatt	tttgctaga	1320
aaagaaaca	gttcagtaga	ggctaaggat	tcaggtttgg	agtctaaaaa	gttaccaga	1380
agtgtaaaat	tggaaaaatc	tgccccagat	actgaactgg	tgaatgtaac	acatctaacc	1440
acagaggtaa	aaaattcttc	agatacaggg	aaagtaaa	tggatgagaa	ctccgagaag	1500
catcttggtta	aagatttgaa	agcacaggga	acaagagact	ctaaacccat	agcactgaaa	1560
gaggagattg	ttactccaaa	ggagacagaa	acatcagaaa	aggagacccc	tcacactctt	1620
ccacaattg	cttctcccc	accctctcta	ccaactacta	cccctccacc	tcagacaccc	1680
cctttgccac	ctttgcctcc	aataaccagct	cttccacagc	aaccacctct	gcctccttct	1740
cagccagcat	ttagtcaggt	tcttgcctcc	agtacttcaa	ctttgcccc	ttctactcac	1800
tcaaagacat	ctgctgtgtc	ctctcaggca	aattctcagc	cccctgtaca	ggtttctgtg	1860
aagactcaag	tatctgtaac	agctgctatt	ccacacctga	aaacttcaac	gttgctcctc	1920
ttgcccctcc	cacccttatt	acctggaggt	gtgacatgg	atagtcocaa	agaaactctt	1980
ccttcaaaac	ctgtgaagaa	agagaaggaa	cagaggacac	gtcacttact	cacagacctt	2040
cctctccctc	cagagctccc	tgggtggagt	ctgtctcccc	cagactctcc	agaacccaa	2100
gcaatcacac	caoctcagca	accatataaa	aagagaccaa	aaatttggtg	tcctcgttat	2160
ggagaaagaa	gacaaacaga	aagcgactgg	gggaaacgct	gtgtggacaa	gtttgacatt	2220
attgggatta	ttggagaagg	aacctatggc	caagtataata	aagccaggga	ctaaagacaca	2280
ggagaactag	tggctctgaa	gaaggtgaga	ctagacaatg	agaaagaggg	cttcccaatc	2340
acagccattc	gtgaaatcaa	aatccttcgt	cagttaatcc	accgaagtgt	tgtaaactatg	2400
aaggaaattg	tcacagataa	acaagatgca	ctggatttca	agaaggacaa	agggtgccttt	2460
tacctttgat	ttgagtatat	ggaccatgac	ttaatgggac	tgctagaatc	tggtttggtg	2520
cacttttctg	aggaccatat	caagtctgtc	atgaaacagc	taatgggaag	attggaatac	2580
tgtcacaata	agaatttcct	gcacccggat	attaagtgtt	ctaacttttt	gctgaataac	2640
agtgggcaaa	tcaaactagc	agattttgga	cttgcctggc	tctataactc	tgaagagagt	2700
cggccttaca	caaacaaagt	cattactttg	tggtaaccgac	ctccagaact	actgctagga	2760
gaggaacgtt	acacaccagc	catagatgtt	tggagctgtg	gatgtattct	tggggaaacta	2820

```

ttcacaaaga agcctatddd tcaagccaat ctggaactgg ctgagctaga actgatcagc 2880
cgactttgtg gtagcccttg tccagctgtg tggcctgatg ttatcaaact gccctacttc 2940
aacaccatga aaccgaagaa gcaatatcga aggcgtctac gagaagaatt ctctttcatt 3000
ccttctgcag cacttgattt attggaccac atgctgcacac tagatcctag taagcgggtg 3060
acagctgaac agaccctaca gagcgacttc cttaaagatg tcgaactcag caaaatggct 3120
cctccagacc tccccactg gcaggattgc catgagttgt ggagtaagaa acggcgacgt 3180
cagcgacaaa gtggtgttgt agtcgaagag ccacctccat ccaaaacttc tcgaaaagaa 3240
actacctcag ggacaagtac tgagcctgtg aagaacagca gccagcacc acctcagcct 3300
gctcctggca aggtggagtc tggggctggg gatgcaatag gccttgctga catcacaca 3360
cagctgaatc aaagtgaatt ggcagtgtta ttaaactgc tgcagagcca aaccgacctg 3420
agcatccctc aaatggcaca gctgcttaac atccactcca acccagagat gcagcagcag 3480
ctggaagccc tgaaccaatc catcagtgc ctgacggaag ctacttccca gcagcaggac 3540
tcagagacca tggccccaga ggagtctttg aagggaagcac cctctgcccc agtgatcctg 3600
ccttcagcag aacagatgac ccttgaagct tcaagcacac cagctgacat gcagaatata 3660
ttggcagttc tcttgagtca gctgatgaaa acccaagagc cagcaggcag tctggaggaa 3720
aacaacagtg acaagaacag tgggccacag gggccccgaa gaactccac aatggccacag 3780
gaggaggcag cagcatgtcc tctcacatt ctccaccag agaagaggcc cctgagccc 3840
cccggacctc caccgccgcc acctccaccc cctctggttg aaggcgatct tccagcgcc 3900
cccaggagtg tgaaccagc cgtgacagcc gccttgctgc aacttttate ccagcctgaa 3960
gcagcagctc ctggccacct gccacatgag caccaggcct tgagaccaat ggagtactcc 4020
acccgacccc gtccaaacag gacttatgga aacactgatg ggctgaaac aggggtcagt 4080
gccattgaca ctgatgaacg aaactctggt ccagccttga cagaatcctt ggtccagacc 4140
ctggtgaaga acaggacctt ctcaggctct ctgagccacc ttggggagtc cagcagttac 4200
cagggcacag ggtcagtgca gtttccaggg gaccaggacc tccgttttgc caggggtccc 4260
ttagcgttac acccggtggt cgggcaacca ttcctgaagg ctgagggaag cagcaattct 4320
gtggtacatg cagagaccaa attgcaaaac tatggggagc tggggccagg aaccactggg 4380
gccagcagct caggagcagg ccttcaactg gggggcccaa ctcagttctc tgcttatgga 4440
aaactctatc gggggcctac aagagtccca ccaagagggg gaagagggag aggagttcct 4500
tactaaccac gagacttcag tgcctgaaa gattccttcc ctatccatcc tccatccag 4560
ttctctgaat cttaatgaa atcatttgcc agagcggagt aatcatctgc atttggctac 4620
tgcaaagctg tccgttgtat tcttgctca cttgctacta gcaggcgact taggaaataa 4680
tgatgttggc accagttccc cctggatggg ctatagccag aacatttact tcaactctac 4740
cttagtagat acaagtagag aatatggaga ggatcattac attgaaaagt aaatgtttta 4800
ttagttcatt gcctgcactt actggctcga agagagaaa aacagtttca gtattgagat 4860
ggctcaggag aggtctcttg atttttaaag ttttgggtg ggggttgtg tgtggtttct 4920
ttcttttgaa ttttaattta ggtgttttg gttttttcc tttaaagaga atagtgttca 4980
caaaatttga gctgctcttt ggcttttgct ataagggaag cagagtggcc tggctgattt 5040
gaataaatgt ttcttttctc tccaccatct cacattttgc ttttaagtga acacttttcc 5100
cccattgagc atcttgaaca tacttttttt ccaataaaat tactcatcct taaagtttac 5160
tccactttga caaaagatac gcccttctcc ctgcacataa agcaggttgt agaactggc 5220
attcttgggc aagtaggtag actttaccca gtctctttcc ttttttgctg atgtgtgctc 5280
tctctctctc tttctctctc tctctctctc tctctctctc tctgtctgtc tcgcttgctc 5340
gctctcgctg tttctctctc tttgagggcat ttgtttggaa aaaatcggtg agatgcccac 5400
gaacctggga taattcttta ctttttttga aataaaggaa aggaaattca aaaaaaaaaa 5460
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 5515

```

<210> 6

<211> 6131

<212> DNA

<213> Homo sapiens

<400> 6

```

gaattctagg cccagttctg tgtttcccct gtgtgttccct aggcagggtca gtttccctcc 60
atgggcctct gtaagatgag gagttggaga ggtacattct caggctactt tcaactccca 120
gccaaagtac tcaagagtcc caggcagcac cagcaccctc atctccaagg cctcctgatg 180
tgtgtctcta tttagaactt aatccaacct acccaacatc agatcagtggt ctaccagacc 240
caagggtccct ggggagcctc ctgaggggag agagccctgc ccaccagat tgagggtaaa 300
ggcctccccg tgctcatttt tgtaccacca cagtgtcttg cacatggtag acatcaaaat 360
gtgtgtgctg aaagtataat tgaagttgtg tatatatgtc agctagagtg tctggagggg 420
cagaaaagtg ggtctaaaac atacaaatgc tccaaatggg gtgtgggcaa ggggtctgtc 480
acaccagggt gtgattacct gctcacatac atgtgtctat ctgagtaggg gtatgttatc 540
tatttttcta caccacaggg tgaggaacag gtatatgtgt gcatgtgtat gcatccgtgt 600

```

gtgtgtgtat	gtgtgtgtgc	atgagtgtgt	gtgtgtgtgt	ccaaagccac	ctcttcaacc	660
tgtgccattt	gtatctgtgt	ctggcccaat	gagagtgttg	aaaggtgagc	cacaagataa	720
aacagcaact	tcctacctcc	cttatcaaga	cagctgtctg	acctacctcc	ccttggccac	780
tcttgggatt	actgggggtt	gcttcagtat	tttcagattt	ttcagaaggg	gaggagaatg	840
cttgagtctc	atccaggaac	ttaggcagtt	ctcagcactg	cctgtctctc	ctccctcaaa	900
taaccaagtc	tgaagaccag	gagagaaagc	cgctgggtgga	ctgggtcacct	gtctggcagt	960
gggaggagga	gagtgaaggg	tttctaggta	ggaatccaga	cttagaccct	ccctccacc	1020
cccagatggg	tggtgcacag	gctcatctcg	cggccctcc	ccactccacc	ctaacatgga	1080
tacgccccca	acaaccaagg	aaagatctcc	catcggtga	ctccacagat	acacacatgt	1140
ccccacagac	acacacacgc	ccatgcagag	gcacagacat	ccaggcacat	ctttcccttt	1200
ctctgtcttt	cccttgggtt	gaatttcgtt	tagccacata	tggtgtgtgt	gcgtgagggg	1260
gggtggggga	ggggcagaca	gggatgaggg	atggcatggt	gccaacatct	acctatgggg	1320
ctcggggccag	ggacgcccct	tacagccatc	ctgggagggg	gtctcagctg	tccctttgtg	1380
gccaaagggga	ccctcctggg	gagtgggggc	aagcacagag	gtcctttctc	cccaaccggg	1440
ggctctggctc	ctgaccaccc	ttgggggcct	gcaggggagg	aaatggacag	agcgggaccc	1500
tgaggggagca	tagaattggc	caccacgagc	ccccagtgct	cagccttgcc	accccatgtg	1560
tcccgtgagg	gggtctctat	atacaggggg	caactcctcc	caccttctct	tcaatccctg	1620
ctttccctgc	gttgggcggg	gaggggaggg	cggcagaaat	atztatttat	ttcctttatt	1680
tatttaattt	tttttttttt	tttttggagt	agagagtga	agatggcggc	gggtcccggg	1740
ggagcggctc	ctccccagt	gcagacgcac	gccaatcacc	gtctctcatg	tgatagctgc	1800
tgcccgtagc	gtgccaaagc	catatggcct	ggcatagagg	ctggtagccc	gcctggtaga	1860
gatgccacac	tcgctccgag	gttcgcatgg	cgctctgaag	acgcccggcg	ccgcccctt	1920
gaggagccgc	tgcccccgct	ccctgaagat	gggggaacaa	tgaaataagc	gagaagatcc	1980
ctcttctccc	ccctctctct	cttgccccct	ccccccctcc	cctccccctc	ccccctgact	2040
cctctccgag	gtaagtgtgc	cgaaggagg	cgagatctga	cccgccgggt	gggaggaggg	2100
gcggcagctt	cgcccgacag	gaggggtcctc	aaatacctcc	ttcctgggat	gatgcccccc	2160
tcattgggtg	ggcatcggag	gggcccagg	ttctctctcc	cttaggggct	gcagcccagg	2220
gggtcgcaga	ggaggtgtct	ctgcctgcga	tgggtcgggt	gggggggggaa	ggcaggatca	2280
cggaggggga	tatgcgaaga	ggccgagacg	gaggacccct	ccatggttgt	cccaaaaagc	2340
ctgcccactt	tccccaccac	cgaaaaaagg	gaagcaaaac	aacaaatttg	gattttttccc	2400
ccatcaatcc	caaaatacaa	cgagatctga	agagccttgt	gggaggagg	cagcttgaag	2460
ggggaagggg	gtccctgacc	gcagagggga	cggactgggc	tcgcttctct	cagtctcctc	2520
cccacgcccc	gctgcttcag	tcctcgccgc	ccagagccgg	ctccgggagc	tggggacgca	2580
tcggctagag	gagacgatcc	tcccgcctct	ggaattgggg	gtgcgggggt	gggggcccag	2640
caaggggcgg	cgcgcagcca	agttgcaaat	tggattaggg	agcgtggggg	tgagagccac	2700
gggagggggtg	agggagctgg	gccggggggc	ccgggcccgc	agagcgcgga	gcggggcagc	2760
tgccccacc	ggcggccgac	cagcctctct	ccaccgccag	gagagaacgg	gctttcaggg	2820
cgaagcgccc	gcctcccctg	gcaaagatat	ctggtcccta	aaacccccac	ccggtccctg	2880
ccctgacctc	gagaagaagc	aggcgcgggg	agcagcccc	cattcaagcg	aggggcccag	2940
ccggggccca	gcgcggggga	gagggcctgg	gcgagatcc	caggccggca	gccgggtagg	3000
gctggggccg	ctctggggcg	ggcaggcgcc	ggaggtgggc	atccagggtg	gcctaggcag	3060
gagccgcac	gagactcggg	ggtggaggag	ggtgtggggg	gggcgtcggt	acccagcgcc	3120
gcccctcact	ttgtgtctgc	tgtctcccct	tccgcggcgc	ggggcgccct	caggcaccat	3180
gctgacccgc	ctgttcagcg	agcccggcct	tctctcggac	gtgcccagt	tcgcccagct	3240
gggcgagcgg	gaagacgagc	agccgaggag	cgacaagggc	gacgcgcgc	caccgcccac	3300
gcctgcgccc	gggcccaggg	ctccggggcc	agcccgggcg	gccaaagccg	tcctctctcc	3360
tggagaagag	gggacggagg	ccacgttggc	cgaggtcaag	gaggaaagcg	agctgggggg	3420
agaggaggag	gaggaaagag	aggagggaag	aggactggac	gaggcgagg	gcgagcgccc	3480
caagaagcgc	gggcccgaag	agcgcaagat	gaccaaggcg	cgcttgagc	gctccaagct	3540
tcggcggcag	aaggcgaaag	cgcgggagcg	caaccgcatg	cacgacctga	cgcagccct	3600
ggacaacctg	cgcaagggtg	tgccctgcta	ctccaagacg	cagaagctgt	ccaagatcga	3660
gacgtgcgc	ctagccaaga	actatatctg	ggcgtctctg	gagatcctgc	gctccggcaa	3720
gcggccagac	ctagtgtcct	acgtgcagac	tctgtgcaag	ggtctgtcgc	agcccaccac	3780
caatctgggt	gccggctgtc	tgacgtcaa	ctctcgcaac	ttctcacgg	agcaaggcgc	3840
cgaggtgccc	ggcggcttcc	acggctcggg	cggcccggtc	gccatgcacc	cctaccgcta	3900
cccgtgctcg	cgcttgggcg	gcgcacagtg	ccaggcgccc	ggcgccctgg	gcggcgccgc	3960
ggcgcaagcc	ctgcggaccc	acggctactg	cgcgcctac	gagacgctgt	atgcggcgcc	4020
aggcggtggc	ggcgcgagcc	cggactacaa	cagctccgag	tacgagggcc	cgctcagccc	4080
cccgtctctg	ctcaatggca	acttctcaat	caagcaggac	tcctcgcccc	accacagaaa	4140
aagctaacac	tactctatgc	actactcgcc	gctgcccgtt	tcgcgcacag	gccacgggct	4200
agtcttcggc	tcgtcggctg	tgcgcggggg	cgtccactcg	gagaatctct	tgtcttacga	4260
tatgcacctt	caccacgacc	ggggcccat	gtacgaagg	ctcaatgcgt	ttttcataa	4320
ctgagacttc	gcgcgggctc	ccttcttttt	cttttgccct	tgcccggccc	cctgtcccca	4380
gccccagca	gcgcagggtg	cacccccatc	ctacccccgg	gccggggcgc	ggggcggggc	4440
caccggtcct	gccgtctctc	tggggcagcg	cagctctgtt	acctgtgggt	ggcctgtccc	4500
aggggcctcg	cttccccccg	gggactcgcc	ttctctctcc	ccaaggggtt	ccctcctcct	4560

```

ctctccaag gagtgcttct ccagggacct ctctccgggg gctccctgga ggcccccctc 4620
ccccattccc aatatcttctg ctgagggttct ctcctccccc tctccctgc agggccaagg 4680
cgttggtaag ggggcagctg agcaatggaa cgcgtttccc cctctcatta ttattttaaa 4740
aacagacacc cagctgccga ggcaaaaagg agccaggcgc tccctcttctc ttgaagaggg 4800
tagtattttg ggcgcggag cccgggctg gaacgccctc acccgcaacc tccagtctcc 4860
gcgttttgcg attttaattt tggcgggagg ggaagtggat tgagaggaaa gagagaggcc 4920
aagacaattt gtaactagaa tccgttttct ccttttctct tttttaaaca aacaaacata 4980
caaaaaaa aaaaaaa aaaaaaa aagctaagag gcgacggaag ccgaacgcag 5040
agtcgggagc ggagagaaaa cgcagtaagg acttttagaa gcaataaaag gcaaaaaaa 5100
caaaaaaa aaaaacaaac aaaaaaa cactactacc aataatcaa gacacaaata 5160
tctatgcaag gaggctccac tgagcctgc ggcccggccc ggcccggga tgcccgcgc 5220
ggcctgcggg ccgcccgcgc cgagcgcgga tctgtgact ttggtgaagt gggggcccg 5280
gccgccccct cccctcccc aggttcttac aatcagtgc tcggagattt ggggcccag 5340
tgccactgcc ctccccgcgc cgtccccgt tgtgcgtcat gctgtttttt aaaaacctgt 5400
ttccaaattt gtatggaatg gcaactgtt ggggggtcgg tttggggagg gagggtttgc 5460
atgaaagaca cagcacacc acaccgcag cacaagcagg cccggcgccg gcgtccggg 5520
ggcagaagga ggtgagctcg ccggctcctc ctccccgcg ccattctgtc ccctcctggg 5580
gtgaggggtg gggatggaga cctgggggca gccccacccc tgcccggact gtgcctcggt 5640
gggtgccacc tggcgatttc cgggtgtctg agagagtatt ttttggcca aggagtcctc 5700
ttggctttag ctggtgggtg ggcggggaga ggtctgagg ctctactgg aggttcccc 5760
aaaaaggggc aaaaggagac cctctgccc cggaggcag gggatcagg atccaaatac 5820
acgatgcaa aatgcaatcc cacaggcgac accccacac actcaccac acacacgcaa 5880
ttttaccttc ctctgtagc gaagatgaa tcccgctcg acaccgaa gacattcggt 5940
gtttctgttc agtttaatga cgattaata atatttatgt aaatgagatg caaagccgga 6000
ccggtttctc acggtggcct catttcatt aggggggaga gaaggttga gctggggctg 6060
gggtgatgaa ggcagagtgt caagtgactg tgacagggcc aaacagaggg acttcccagc 6120
aaaaagcact g 6131
<210> 7

```

<211> 2020

<212> DNA

<213> Homo sapiens

```

<400> 7
gctactgagg ccgcgaggcc ggactgcggt tggggcgagg agagccgggg ccgtggctga 60
catggagcag ccctgctgct gaggccgcgc cctccccgcc ctgaggtagg ggcccaccag 120
gatgagcaag ctgcccaggg agctgacccg agacttgagg cgcagcctgc ctgcccgtggc 180
ctccctgggc tctcactgt cccacagcca gaggctctcc tcgcacctcc ttccgcccgc 240
tgagaagcga agggccatct ctgatgtccg ccgcaccttc tgtctcttcg tcaccttcga 300
cctgctcttc atctccctgc tctggatcat cgaactgaat accaacacag gcatccgtaa 360
gaacttgagg caggagatca tccagtacaa ctttaaaact tccttcttcg acatctttgt 420
cctggccttc ttccgcttct ctggactgct cctaggctat gccgtgctgc agctccggca 480
ctggtgggtg attgcggtca cgacgtggt gtccagtgc tctctcattg tcaaggtcat 540
cctctctgag ctgctcagca aaggggcatt tggctacctg ctcccacatg tctcttttgt 600
cctcgccctg ttggagacct ggttccttga cttcaaagtc ctaccccagg aagctgaaga 660
ggagcgatgg tatcttgccg ccaggttgc tgttgccgt ggaccctgc tgttctccgg 720
tgctctgtcc gagggacagt tctattcacc ccagaatcc tttgcagggt ctgacaatga 780
atcagatgaa gaagttgctg ggaagaaaag tttctctgct caggagcggg agtacatccg 840
ccaggggaag gaggccacgg cagtgggtga ccagatcttg gccaggaag agaactggaa 900
gtttgagaag aataatgaat atggggacac cgtgtacacc attgaagttc cttttcacgg 960
caagacgttt atcctgaaga ccttctgcc ctgtcctgcg gagctcgtgt accaggaggt 1020
gatcctgcag cccgagagga tgggtgctgtg gaacaagaca gtgactgcct gccagatcct 1080
gcagcgagtg gaagacaaca cctcatctc ctatgacgtg tctgcagggg ctgcccggcg 1140
cgtggtctcc ccaagggact tctggaatgt ccggcgcatg gagcggcgca gggaccgata 1200
cttgtcatca gggatcgcca cctcacacag tgccaagccc ccgacgcaca aatatgtccg 1260
gggagagaat ggccctgggg gcttcacgt gctcaagtcg gccagtaacc cccgtgtttg 1320
cacctttgtc tggattctta atacagatct caagggcgcg ctgcccgggt acctcatcca 1380
ccagagcctc gcggccacca tgtttgaatt tgcctttcac ctgacagagc gcatcagcga 1440
gctggggggc cgggcggtgac tgtgccccct cccaccctgc gggccagggt cctgtcgcca 1500
ccacttcag agccagaaag ggtgccagtt gggctcgcac tgcccacatg ggacctggcc 1560
ccaggtgtc accctccacc gagccacgca gtgcctggag ttgactgact gagcaggctg 1620
tgggggtggag cactggactc cggggcccca ctggctggag gaagtggggg ctggcctgtt 1680

```

gatgtttaca	tggcgccctg	cctcctggag	gaccagattg	ctctgcccc	ccttgccagg	1740
gcagggtctg	ggctgggcac	ctgacttggc	tggggaggac	cagggccctg	ggcagggcag	1800
ggcagcctgt	cacccgtgtg	aagatgaagg	ggctcttcat	ctgcctgcgc	tctcgtcggt	1860
tttttttagga	ttattgaaag	agtctgggac	ccttggttggg	gagtgggtgg	caggtggggg	1920
tgggctgctg	gccatgaatc	tctgcctctc	ccaggctgtc	cccctcctcc	cagggcctcc	1980
tgggggacct	ttgtattaag	ccaattaaaa	acatgaattt			2020

<210> 8

<211> 1730

<212> DNA

<213> Homo sapiens

<400> 8						
gtggtgaggg	tgactgggga	ctaggcacta	ggcctttggt	gcaggcgcct	gaggacktgg	60
ttgcactctc	ccttctgggg	atatgccctt	gagcccaggc	agaggagagc	acagcccagg	120
gcaggacctg	gcagccctgg	tacagagccc	agagggggca	tcagttcctg	ctggtcctgc	180
tctgtttaca	gacaasctgc	tgtcctccct	gcaaagggga	gtgggtgggg	cagagggcaa	240
ktggcagggg	ggcacaaggc	tgggcatgtg	gctggcatga	gacgggtgtc	gagtaatgtc	300
aggcacctgg	aggcattgac	cccaggacct	tggaccccag	acctctgacc	gtggggcagc	360
cagcgtccag	gtaccccaac	ccctgccctg	ggtccggcgt	ccccccatta	gtgagtcttg	420
gctctactta	tagcatctga	caccagaggg	gccgaaaata	gcccctggag	aagggggagg	480
agggggctat	ttaaagggcc	tgggagggga	gagagaatga	ggagtgatca	tggctacctc	540
agagctgagc	tgcgaggtgt	cggaggagaa	ctgtgagcgc	cgggaggcct	tctgggcaga	600
atggaaggat	ctgacactgt	ccacacggcc	cgaggagggg	tgagtgtggg	tctgctagag	660
tccctgcctc	tgctccccca	gagcacctc	actgagccat	gaggccagag	catgaagccc	720
tggagaaatt	tctgggggtg	ggggcaggaa	gaatgcccga	tggggagagc	aaaggggaac	780
cacccttcct	gccccaggt	cccagcagcc	caggggagcc	ccccaccag	cctgtgcccc	840
gagagcaaca	gctcccagga	gctcactgcc	cctcccctct	ccccagctgc	tccctgcatg	900
aggaggacac	ccagagacat	gagacctacc	accagcaggg	gcagtgccag	gtgctggtgc	960
agcgtcgc	ctggctgatg	atgcggatgg	gcatectcgg	ccgtgggctg	caggagtacc	1020
agctgcccta	ccagcgggta	ctgccgctgc	ccatcttcac	ccctgccaa	atgggcgcga	1080
ccatggagga	gcgtgaggac	acccccatcc	agcttcagga	gctgctggcg	ctggagacag	1140
ccctgagttc	ccagtgtgtg	gaccgccagg	aggtagctga	gatcacaaag	cagctgcccc	1200
ctgtggtgcc	tgctagcaag	ccgggtgcmc	ttcgtcgtc	cctgtcccgc	tccatgtccc	1260
aggaagcaca	gagaggctga	gagggactgt	gacttgggct	ccgtgtgtgc	cgcccccttg	1320
gctggggcct	tcctggctag	gacctgtgga	ggggcagctc	gctggcccat	ggctgctttg	1380
tagtttggcc	agagtggggg	gctaggggag	gggggagcca	gaggccagga	tgccctgagcc	1440
ccctgagttc	ccaaaggagg	ggtggcagag	acagtgggca	ctaagggtgg	agagtggggg	1500
gccagccag	ctgaggaccc	tcagccccag	gagaagggac	aaaagggtact	ggtgagggca	1560
agaggtgcct	gggaggagtg	gccctgatcc	aggaaaatgt	gaggggaatc	tggaaacgctc	1620
taggcagaag	aagctgggag	ggagggggag	gtgaaaaggg	cagaggcaag	gatggtgggg	1680
ccccagcagc	cctctgttag	tgccgcaata	aatgetcaat	catgtgccag		1730

<210> 9

<211> 3799

<212> DNA

<213> Homo sapiens

<400> 9						
ctggcactgg	gtggtaacca	gcaagccagc	tggcatccgc	atccagggtt	tggtttcaatg	60
atgtctcgtg	gagaatatgg	aggggctggt	gccaggactg	tccttggcct	tgccctgggg	120
tgtgaacggg	gtcagtgacc	tctaaaacta	acctgcctct	cagttctgaa	tccagacaga	180
atcaatcctc	agctgtgtct	cgctccacac	cccctgccct	ggaagccagg	gaaggttgga	240
gggtgctagg	ggctcaggtc	ccctctgtga	cccctgcagc	tggtgtggtg	actcatgtcc	300
caacctagct	gcctctccca	aggagacttt	cccctgggac	aagggggagg	gaatggcatg	360
gaggaggccc	acatcaagcg	gggcccaggaa	cccacggtgg	caggagctgg	gctgggtgacc	420
tacccagggc	agaaggggcc	gggactcatc	cagaggggaa	ggaaggggtc	ttcaggaaga	480
ccacggagat	gccacaggca	gaattggcct	cccctctggg	agataggtgg	ggagaccctg	540

gcattttgac	agccagaacc	tggggtgctg	agcagaatct	tcatgcctgg	cctggccgccc	600
ttcggaggga	agctggaggg	ttgggtgcca	gaggagtggg	gtcagagccc	ctacatccgc	660
aggaccccaa	atcggctggg	ccccaaggcc	cggactgcgc	tccccggtgg	ccccggcggc	720
cctccgcgaa	tgctgcctgc	ccctcccctg	cccaagccct	ctgccctcac	ccgggtccgg	780
cgccgcccc	gaagtggcgg	gaacaaccgc	aacccgaacc	ttctgtcctc	gggagccccc	840
agataagcgg	ctgggaaccc	gcggggcccc	caggggaggc	ccggctgttc	cgcccgctaa	900
gtgcattagc	acagctcacc	tcccctatcg	cgctgccc	cggacgggca	gtgccgcgcc	960
ctgctctggg	gcccccgag	cgaccacagc	ggaggccgga	acggactgtc	ctttctgggg	1020
cgggggtggg	agggggtgtc	gctggagggc	ccgggtggcat	agcaacggac	gagagaggcc	1080
tggaggaggg	gcggggaggg	ggagtgtgtg	ggcagttcta	aggggaagggt	gggtgctggg	1140
acgggtgtcc	gggaggaggg	ggagcctggc	ggggtctggg	gcctcgctcg	ggaggcgct	1200
gcgaggggga	aactggggaa	agggccta	tccccagctc	ccacctcgaa	tcaggaaaga	1260
gaaggggcgg	gctgctgggc	aaaagagggt	aatggctgcg	gggggctgga	gaagagagat	1320
gggagggggc	ggccggcggt	gtgaggggg	tctaaagatt	gtgggggtga	ggaactgagg	1380
gtggggggcg	cccagaggcg	ggactcgggg	cggggcaggc	gaggcgagg	gcgagggctg	1440
cgggagcaag	tacggagccg	ggggtgtggg	ggacgattgc	cgctgcagcc	gccgccccac	1500
tcacctccgg	tgtgtctgca	gcccggacac	taaggagat	ggatgaatgg	gtggggagga	1560
tggggcgcac	atggcccccg	gcggctcggc	ggtcagctgc	cgccccaca	gcggaccggt	1620
gtcggggcggt	gtcggggcggt	agaaaaaagg	gcgcgaggc	gagcggggca	ctgggcggac	1680
cgcgggcgga	gcatgagcgg	cgagaccgt	agccccaatg	cgggcgcagc	ccctgactcg	1740
gccccggggc	aggcgggcgt	ggcttcggcc	taccagcgct	tcgagccgcg	cgctacctc	1800
cgcaacaact	acgcgcccc	tcgcggggac	ctgtgcaacc	cgaacggcgt	cgggcccgtg	1860
aagctgcgct	gcttggcgca	gaccttcgcc	accggtgagc	gggggaaact	gaggcacgag	1920
ggacaagagg	tcgtcgggga	gtgaaagcag	gcgcagggaa	ataaaaagaa	ggaaaggag	1980
acagaccagg	cgccctaacag	atggggacca	agaaacaaga	gatagctgag	aggtgcaaac	2040
agaagagaaa	aaggagcaac	atcccttagg	agaggggcag	aggagagaga	ggtggagaga	2100
ggggggcgag	agtgtctaga	attgagagct	aagggtgggg	atgcaggaca	gactgagggtg	2160
gagatgcata	ggaggaaa	gaggcagatg	tgggacaggg	gtgagaaa	ccaggatttc	2220
ctcgctgagc	ctggctggtg	ggtatagtgt	ttttctttct	ttttctttat	tttattttca	2280
tttattttact	tattttttatt	ttttatttgt	tttgagacgg	agtttcgctc	ttgttgccca	2340
ggctggagta	caatggcgcc	atctcggctc	actgcaacct	ccgcctcccc	gggttcaagc	2400
gatttctctg	cctcagcttc	cctagtagct	gggattacag	gcatgcgccc	ccatgcctgg	2460
ctaattttatt	tgtattttta	gtagagacgg	gacttctcca	tggttggtcag	gctgggtctcg	2520
aactcccaac	cttaggatcc	acccaccccg	gcctcccaaa	gtgctgggat	tacaggtgtg	2580
agccactgcg	ccgggccagt	aggtatagtc	ttctagatgt	gaaacctgag	tctcagagcg	2640
gtgaagtcc	cttccgaagg	gcagcccacg	ttggagctgg	gttcagctca	actctggggc	2700
caatgctttt	tccagatgga	gacacatttg	cagaggagaa	ggaagaacta	gagagaggca	2760
gggagatgca	ggggagggaa	gggtaaggag	gcaggggctg	cctgggctgg	ctggcaccag	2820
gacctcttc	ctctgccctg	cccagtgaa	gtgtccggac	gcacctcat	cgacattggt	2880
tcaggcccca	ccgtgtacca	gctgctcagt	gcctgcagcc	actttgagga	catcaccatg	2940
acagatttcc	tggaggtcaa	ccgccaggag	ctggggcgct	ggctgcagga	ggagccgggg	3000
gccttcaact	ggagcatgta	cagccaacat	gcctgcctca	ttgagggcaa	ggggtaaggga	3060
ctgggggggtg	aggggtgggg	aggaggcttc	ccatagagt	gctgggtggg	gcaacagagg	3120
cctgagcgta	gaacagcctt	gagccctgcc	ttgtgcctcc	tgacacaggga	atgctggcag	3180
gataaggagc	gccagctgcg	agccagggtg	aaacgggtcc	tgcccatcga	cgtgcaccag	3240
ccccagcccc	tgggtgctgg	gagccacgct	cccctgcctg	ctgacgccct	ggtctctgcc	3300
ttctgcttg	aggctgtgag	cccagatctt	gccagcttcc	agcgggccct	ggaccacatc	3360
accacgctgc	tgaggcctgg	ggggcacctc	ctcctcatcg	gggccttggg	ggagtcgtgg	3420
tacctggctg	gggagggcag	gctgacgggt	gtgccagtgt	ctgaggagga	ggtaggggag	3480
gccctgggtg	gtagtggcta	caaggctcgg	gacctccgca	cctatatcat	gcctgcccac	3540
cttcagacag	gcgtagatga	tgtcaagggc	gtcttcttcg	cctgggctca	gaagggtggg	3600
ctgtgagggc	tgtacctggg	gccctgtggc	ccccaccac	ctggattccc	tgttctttga	3660
agtggcacct	aataaagaaa	taataaccctg	ccgtgcgggt	cagtgcgtgtg	tgtggctctc	3720
ctgggaagca	gcaaggggccc	agagatctga	gtgtccgggt	aggggagaca	ttcacctag	3780
gctttttttc	cagaagctt					3799

<210> 10

<211> 4530

<212> DNA

<213> Homo sapiens

<400> 10						
aattctcgag	ctcgtcgacc	ggctcgacgag	ctcggagggtc	gacgagctcg	agggcgcgcg	60
cccgcccccc	acccctcgca	gcaccccgcg	cccccgcccc	tcccagccgg	gtccagccgg	120
agccatgggg	ccggagccgc	agtgagcacc	atggagctgg	cgcccttggt	ccgctggggg	180
ctcctcctcg	ccctcttgcc	ccccggagcc	gcgagcacc	aagtgtgcac	cggcacagac	240
atgaagctgc	ggctccctgc	cagtcccgag	acccacctgg	acatgctccg	ccacctctac	300
cagggctgcc	agggtggtgca	gggaaacctg	gaactcacct	acctgcccac	caatgccagc	360
ctgtccttcc	tgcaggatat	ccaggagggtg	cagggctacg	tgctcatcgc	tcacaaccaa	420
gtgaggcagg	tcccactgca	gaggctgcgg	attgtgagag	gcacccagct	ctttgaggac	480
aactatgccc	tggcctgctc	agacaatgga	gacccgctga	acaataccac	ccctgtcaca	540
ggggcctccc	caggaggcct	gcgggagctg	cagcttcgaa	gcctcacaga	gatcttgaaa	600
ggagggtgct	tgatccagcg	gaacccccag	ctctgtacc	aggacacgat	tttgtggaag	660
gacatcttcc	acaagaacaa	ccagctggct	ctcacactga	tagacaccaa	ccgctctcgg	720
gcctgccacc	cctgttctcc	gatgtgtgag	ggctcccgc	gctggggaga	gagttctgag	780
gattgtcaga	gcctgacgcg	cactgtctgt	gccggtggct	gtgcccgcct	caaggggcca	840
ctgcccactg	actgtgcca	tgagcagtgt	gctgcccggc	gcacggggcc	caagcactct	900
gactgcctgg	cctgcctcca	cttcaaccac	agtggcatct	gtgagctgca	ctgcccagcc	960
ctggctcacct	acaacacaga	cacgtttgag	tccatgcccc	atcccaggag	ccggtataca	1020
ttcggcgcca	gctgtgtgac	tgccctgtcc	tacaactacc	tttctacgga	cgtgggatcc	1080
tgacccctcg	tctgccccct	gcacaaccaa	gaggtgacag	cagaggatgg	aacacagcgg	1140
tgtgagaagt	gcagcaagcc	ctgtgcccga	gtgtgctatg	gtctgggcat	ggagcacttg	1200
cgagaggtga	gggcagtta	cagtgcgaat	atccaggagt	ttgctggctg	caagaagatc	1260
tttgggagcc	tggcatttct	gccggagagc	tttgatgggg	accagccctc	caacactgcc	1320
ccgctccagc	cagagcagct	ccaagtgttt	gagactctgg	aagagatcac	aggttacctt	1380
tacatctcag	catggccgga	cagcctgcct	gacctcagcg	tcttccagaa	cctgcaagta	1440
atccggggac	gaattctgca	caatggcgcc	tactcgctga	ccctgcaagg	gctgggcatc	1500
agctggctgg	ggctgcgctc	actgagggaa	ctgggcagtg	gactggccct	catccaccat	1560
aacacccacc	tctgcttcgt	gcacacgggtg	ccctgggacc	agctctttcg	gaacccgcac	1620
caagctctgc	tccacactgc	caaccggcca	gaggacgagt	gtgtgggcca	gggcctggcc	1680
tgccaccagc	tgtgcgcccc	agggcactgc	tgggttccag	ggcccaccca	gtgtgtcaac	1740
tgcagccagt	tccttcgggg	ccaggagtgc	gtggaggaat	gccgagtact	gcaggggctc	1800
cccaggaggt	atgtgaatgc	caggcactgt	ttgcgctgcc	accctgagtg	tcaggcccag	1860
aatggctcag	tgacctgttt	tggaccggag	gctgaccagt	gtgtggcctg	tgcccactat	1920
aaggaccctc	ccttctgcgt	ggcccgcctg	cccagcggtg	tgaacctga	cctctcctac	1980
atgcccactc	ggaagtttcc	agatgaggag	ggcgcatgcc	agccttgccc	catcaactgc	2040
accactcct	gtgtggacct	ggatgacaag	ggctgccccg	ccgagcagag	agccagccct	2100
ctgacgtcca	tcgtctctgc	gggtgttggc	attctgctgg	tcgtgtgtct	gggggtggct	2160
tttgggatcc	tcatcaagcg	acggcagcag	aagatccgga	agtacacgat	gcgagactg	2220
ctgcaggaaa	cggagctggg	ggagccgctg	acacctagcg	gagcgatgcc	caaccaggcg	2280
cagatgcgga	tcctgaaaga	gacggagctg	aggaagggtg	aggtgcttgg	atctggcgct	2340
tttggcacag	tctacaaggg	catctggatc	cctgatgggg	agaatgtgaa	aattccagtg	2400
gccatcaaag	tgttgaggga	aaacacatcc	ccaaagacca	actagacgaa	cttagacgaa	2460
gcatacgtga	tggctgggtg	gggctcccca	tatgtctccc	gccttctggg	catctgcctg	2520
acatccacgg	tgcagctggg	gacacagctt	atgcctatg	gctgcctctt	agaccatgtc	2580
cgggaaaacc	gcggacgcct	gggctcccag	gacctgctga	actggtgtat	gcagattgcc	2640
aaggggatga	gtaacctgga	ggatgtgcgg	ctcgtacaca	gggacttggc	cgctcggaac	2700
gtgctgggtc	agagtcccaa	ccatgtcaca	attacagact	tcgggctggc	tcggctgctg	2760
gacattgacg	agacagagta	ccatgcagat	gggggcaagg	tgcccatcaa	gtggatggcg	2820
ctggagtcca	ttctccgccc	gcggttcacc	caccagagtg	atgtgtggag	ttatggtgtg	2880
actgtgtggg	agctgatgac	ttttggggcc	aaaccttacg	atgggatccc	agccggggag	2940
atccctgacc	tgttggaata	gggggagcgg	ctgccccagc	cccccatctg	caccattgat	3000
gtctacatga	tcatggtcaa	atgttggatg	attgactctg	aatgtcggcc	aagattccgg	3060
gagttggtgt	ctgaattctc	ccgcatggcc	agggaccccc	agcgctttgt	ggtcatccag	3120
aatgaggact	tgggcccagc	cagtcccttg	gacagcacct	tctaccgctc	actgctggag	3180
gacgatgaca	tgggggacct	ggtggatgct	gaggagtatc	tggtacccca	gcagggcttc	3240
ttctgtccag	accctgcccc	gggcgctggg	ggcatgggtc	accacaggca	ccgcagctca	3300
tctacaggga	gtggcggtgg	ggacctgaca	ctagggtgg	agccctctga	agaggaggcc	3360
cccagggtctc	cactggcacc	ctccgaaggg	gctggctccg	atgtatttga	tggtagacctg	3420
ggaatggggg	cagccaaggg	gctgcaaagc	ctccccacac	atgaccccag	ccctctacag	3480
cggtagactg	aggaccccac	agtacccctg	ccctctgaga	ctgatggcta	cgttgccccc	3540
ctgacctgca	gccccagcc	tgaatatgtg	aaccagccag	atgttcggcc	ccagccccct	3600
tcgccccgag	agggccctct	agcactgctc	gtgccactct	gtgggggtgc	ggaaaggggc	3660
aagactctct	ccccagggaa	gaatgggggtc	gtcaaagacg	tttttgccct	tgggggtgccc	3720
gtggagaacc	ccgagtactt	gacaccccag	ggaggagctg	ccctcagcc	ccacctcct	3780
cctgccttca	gcccagcctt	cgacaacctc	tattactggg	accaggaccc	accagagcgg	3840
ggggctccac	ccagcacctt	caaagggaca	cctacggcag	agaacccaga	gtacctgggt	3900

ctggacgtgc	cagtgtgaac	cagaaggcca	agtcgcgaga	agccctgatg	tgctctcagg	3960
gagcagggaa	ggcctgactt	ctgctggcat	caagaggttg	gagggccctc	cgaccacttc	4020
caggggaacc	tgccatgcca	ggaacctgtc	ctaaggaacc	ttccttcctg	cttgagttcc	4080
cagatggctg	gaaggggtcc	agcctcgttg	gaagaggaaac	agcactgggg	agtctttgtg	4140
gattctgagg	ccctgcccac	tgagactcta	gggtccagtg	gatgccacag	cccagcttgg	4200
ccctttcctt	ccagatcctg	ggtactgaaa	gccttaggga	agctggcctg	agaggggaag	4260
cggccctaag	ggagtgtcta	agaacaaaag	cgacccattc	agagactgtc	cctgaaacct	4320
agtactgccc	cccatgagga	aggaacagca	atggtgtcag	tatccaggct	ttgtacagag	4380
tgcttttctg	tttagttttt	actttttttg	ttttgttttt	ttaaagacga	aataaagacc	4440
caggggagaa	tggtgttgt	atggggaggc	aagtgtgggg	ggctcttctc	cacaccact	4500
ttgtccattt	gcaaatatat	tttgaaaaac				4530

<210> 11

<211> 2205

<212> DNA

<213> Homo sapiens

<400> 11

cacagggctc	ccccccgct	ctgactttct	tgctccgaagt	cgggacaccc	tcctaccacc	60
tgtagagaag	cgggagtgga	tctgaaataa	aatccaggaa	tctgggggtt	cctagacgga	120
gccagacttc	ggaacgggtg	tctgtctact	cctgctgggg	ctcctccagg	acaagggcac	180
acaactgggt	ccgttaagcc	cctctctcgc	tcagacgcca	tgtagctgga	tctgtctcca	240
cctcatctta	gcagctctcc	ggaagacctt	tgccagcccc	ctgggacccc	tcctgggact	300
ccccggcccc	ctgatacccc	tctgcctgag	gaggtaaaga	ggtcccagcc	tctctctatc	360
ccaaccacccg	gcaggaaaact	tcgagaggag	gagaggcggtg	ccacctccct	cccctctatc	420
cccaacccct	tccttgagct	ctgcagtcct	ccctcacaga	gcccattct	cgggggcccc	480
tccagtgcac	gggggctgct	cccccgcat	gccagccgcc	cccatgtagt	aaaggtgtac	540
agtgaggatg	gggcctgcag	gtctgtggag	gtggcagcag	gtgccacagc	tcgccacgtg	600
tgtagaaatgc	tggtgcagcg	agctcacgcc	ttgagcgacg	agacctgggg	gctgggtggag	660
tgccaccccc	acctagcact	ggagcggggt	ttggaggacc	acgagtcctg	ggtaggaagt	720
caggctgcct	ggcccggtgg	cggagatagc	cgcttcgtct	tcgggaaaaa	cttcgccaag	780
tacgaactgt	tcaagagctc	cccacactcc	ctgttcccag	aaaaaatggt	ctccagctgt	840
ctcgatgcac	acactgggat	atcccatgaa	gacctcatcc	agaacttcct	gaatgtctggc	900
agctttcctg	agatccaggg	ctttctgcag	ctcgggggtt	caggacggaa	gctttggaaa	960
cgctttttct	gtttcttgcg	ccgatctggc	ctctattact	ccaccaaggg	cacctctaag	1020
gatccgaggc	acctgcagta	cgtggcagat	gtgaacgagt	ccaacgtgta	cgtggtgacg	1080
cagggccgca	agctctacgg	gatgccact	gacttcgggt	tctgtgtcaa	gcccacaag	1140
cttcgaaatg	gacacaagg	gcttcggatc	ttctgcagtg	aagatgagca	gagccgcacc	1200
tgctggctgg	ctgccttccg	cctcttcaag	tacgggggtg	agctgtacaa	gaattaccag	1260
caggcacagt	ctcgccatct	gcattccatct	tggttgggct	ccccaccctt	gagaagtgcc	1320
tcagataata	ccctgggtgg	catggacttc	tctggccatg	ctgggcgtgt	cattgagaac	1380
ccccggggag	ctctgagtg	ggccctggag	gaggccagag	cctggaggaa	gaagacaaac	1440
caccgcctca	gcctgcccac	gccagcctcc	ggcacgagcc	tcagtgcagc	catccaccgc	1500
acccaactct	ggttccacgg	gcgcatttcc	cgtgaggaga	gccagcggct	tattggacag	1560
cagggtcttg	tagacggcct	gttcctgggtc	cgggagagtc	agcgggaacc	ccagggcttt	1620
gtcctctctt	tgtgccacct	gcagaaagt	aagcattatc	tcattcctgcc	gagcgaggag	1680
gagggctgcc	tgtacttcag	catggatgat	ggccagaccc	gcttcaactga	cctgctgcag	1740
ctcgtggagt	tccaccagct	gaaccgcggc	atcctgccgt	gcttgcctgc	ccattgctgc	1800
acgcgggtgg	ccctctgacc	aggccgtgga	ctggctcatg	cctcagcccg	ccttcaggct	1860
gcccgcggcc	cctccaccca	tccagtggac	tctggggcgc	ggccacaggg	gacgggatga	1920
ggagcgggag	ggttccgcca	ctccagtttt	ctcctctgct	tctttgcctc	cctcagatag	1980
aaaacagccc	ccactccagt	ccactcctga	cccctctcct	caaggggaag	ccttgggttg	2040
ccccctctcc	ttctcctagc	tctggaggtg	ctgctctagg	gcaggggaatt	atggggagaag	2100
tgggggcagc	ccaggcggtt	tcacgcccc	cactttgtac	agaccgagag	gccagttgat	2160
ctgctctgtt	ttatactagt	gacaataaag	attatttttt	gatac		2205

<210> 12

<211> 2177

<212> DNA

<213> Homo sapiens

<400> 12
gaattcgcgg cgcgtggttt gcagctgctc cgtcatcgtg cggcccgacg ctatctcgcg 60
ctcgtgtgca ggcccggctc ggctcctggt ccccggtgcg aggggttaacg cgaggcccg 120
gcctcgggcc ccggactagg ccgtgacccc ggggtgccatg aagcaggagg gctcggcgcg 180
gcgcccggcg gcggacaagg cgaaaccgcc gcccggcgga ggagaacaag aacccccacc 240
gccgcccggc ccccgaggatg tggagatgaa agaggaggca gcgacgggtg gcgggtcaac 300
gggggaggga gacggcaaga cggcgggcggc agcgggtgag cactcccagc gagagctgga 360
cacagtcaac ttggaggaca tcaaggagca cgtgaaacag ctagagaaaag cggtttcagg 420
caaggagccg agattcgtgc tgcgggccct gcggatgctg ccttcacat caccgcgcct 480
caaccactat gttctgtata aggctgtgca gggcttcttc acttcaaata atgccactcg 540
agactttttg ctcccccttc tgggaagacc catggacaca gaggctgatt tacagttccg 600
tccccgcacg ggaaaagctg cgtcgacacc cctcctgcct gaagtggaag cctatctcca 660
actcctcgtg gtcattctca tgatgaacag caagcgtac aaagaggcac agaagatctc 720
tgatgatctg atgcagaaga tcagtactca gaaccgccgg gccctagacc ttgtagccgc 780
aaagtgttac tattatcacg cccgggtcta tgagttcctg gacaagctgg atgtggtgcg 840
cagcttcttg catgctcggc tccggacagc tacgcttcgg catgacgcag acgggcaggc 900
caccctgttg aacctcctgc tgcggaatta cctacactac agcttgtacg accaggctga 960
gaagctggtg tccaagctcg tgttcccaga gcaggccaac aacaatgagt gggccaggta 1020
cctctactac acaggggcga tcaaagccat ccagctggag tactcagagg cccggagaac 1080
gatgaccaac gcccttcgca aggccctca gcacacagct gtcggcttca aacagacggt 1140
gcacaagctt ctcatcgtgg tggagctgtt gctgggggag atccctgacc ggctgcagtt 1200
ccgccagccc tccctcaagc gctcactcat gccctatttc cttctgactc aagctgtcag 1260
gcagagaaac ctagccaagt tcaaccaggc cctggatcac tttggggaga agtttcaagc 1320
agatgggacc tacaccctaa ttatccggtc gcggcacaac gtgattaaga cagggtgtacg 1380
catgatcagc ctctcctatt cccgaatctc cttggctgac atcgcccaga agctgcagtt 1440
ggatagcccc gaagatgcag agttcattgt tgccaaggcc atccgggatg gtgtcattga 1500
ggccagcatc aaccacgaga agggctatgt ccaatccaag gagatgattg acatctatc 1560
caccgagag cccagctag ccttccacca gcgcattctc ttctgcctag atatccaca 1620
catgtctgtc aaggccatga ggtttcctcc caaatcgtac aacaaggact tggagtctgc 1680
agaggaacgg cgtgagcgag aacagcagga cttggagttt gccaggaga tggcagaaga 1740
tgatgatgac agcttccctt gagctggggg gctggggagg ggtaggggga atggggacag 1800
gctctttccc ccttgggggt cccctgccc gggcactgtc cccattttcc cacacacagc 1860
tcatactctg cattcgtgca gggggtgggg gtgctgggag ccagccaccc tgacctcccc 1920
cagggtcctt cccagccgg tgacttactg tacagcaggc aggagggtgg gcaggcaacc 1980
tccccgggca gggtcctggc cagcagtggt ggagcaggag gggaaggata gttctgtgta 2040
ctcctttagg gagtggggga ctagaactgg gatgtcttgg cttgtatgtt ttttgaagct 2100
tcgattatga tttttaaaca ataaaaagtt ctcccaaaaa aaaaaaaaaa aaaaaaaaaa 2160
aaagcggccg cgaattc 2177

<210> 13

<211> 2960

<212> DNA

<213> Homo sapiens

<400> 13
ctgccgcttc caggcgtcta tcagcggctc agcctttgtt cagctgttct gttcaaacac 60
tctggggcca ttcaggcctg ggtggggcag cgggagggaag ggagtttgag gggggcaagg 120
cgacgtcaaa ggaggatcag agattccaca atttcacaaa actttcgcaa acagcttttt 180
gttccaaccc cctgcattg tcttggaacac caaatttgca taaatcctgg gaagttatta 240
ctaagcctta gtcgtggccc caggtaattt cctcccaggc ctccatgggg ttatgtataa 300
agggccccc agagctgggc cccaaaacag cccggagcct gcagcccagc cccaccacaga 360
cccattggctg gacctgccac ccagagcccc atgaagctga tgggtgagtg tcttggccca 420
ggatgggaga gccgcctgcc ctggcatggg agggaggctg gtgtgacaga ggggctgggg 480
atccccgttc tggaatggg gattaaaagg acccagtgtc cccgagaggg cctcaggtgg 540
tagggaacag catgtctcct gagcccgctc tgtccccagc cctgcagctg ctgctgtggc 600
acagtgcact ctggacagtg caggaagcca cccccctgg ccctgccagc tccctgcccc 660
agagcttctt gctcaagtgc ttagagcaag tgaggaagat ccagggcgat ggcgacgcgc 720
tccaggagaa gctggtgagt gaggtgggtg agagggtgt ggagggaagc ccggtgggga 780
gagctaaggg ggatggaact gcagggcca catcctctgg aagggacatg ggagaatatt 840

```

aggagcagtg gagctgggga aggctgggaa gggacttggg gaggaggacc ttggtgggga 900
cagtgtctcg gagggctggc tgggatggga gtggaggcat cacattcagg agaaagggca 960
agggccccctg tgagatcaga gagtgggggt gcagggcaga gaggaactga acagcctggc 1020
aggacatgga gggaggggaa agaccagaga gtcggggagg acccggaag gagcggcgac 1080
ccggccacgg cgagtctcac tcagcatcct tccatcccca gtgtgccacc tacaagctgt 1140
gccaccccgga ggagctggtg ctgctcggac actctctggg catcccctgg gctcccctga 1200
gcagctgccc cagccaggcc ctgcagctgg tgagtgtcag gaaaggataa ggctaataag 1260
gagggggaag gagaggagga acacccatgg gctcccccat gtctccagggt tccaagctgg 1320
gggcctgacg tatctcaggc agcaccccct aactcttccg ctctgtctca caggcagggt 1380
gcttgagcca actccatagc ggccttttcc tctaccaggg gctcctgcag gccctggaag 1440
ggatctcccc cgagttgggt cccaccttgg acacactgca gctggacgtc gccgactttg 1500
ccaccaccat ctggcagcag gtgagccttg ttgggcaggg tggccaaggt cgtgctggca 1560
ttctgggcac cacagccggg cctgtgtatg ggccctgtcc atgctgtcag cccccagcat 1620
ttcctcattt gtaataacgc ccactcagaa gggcccaacc actgatcaca gctttccccc 1680
acagatggaa gaactgggaa tggcccctgc cctgcagccc acccagggtg ccatgccggc 1740
cttcgcctct gctttccagc gccgggcagg aggggtcctg gttgcctccc atctgcagag 1800
cttcctggag gtgtcgtacc gcgttctacg ccaccttgcc cagccctgag ccaagccctc 1860
cccattcccat gtatttatct ctatttaata tttatgtcta tttaaagctc atatttaaag 1920
acaggggaaga gcagaacgga gccccaggcc tctgtgtcct tccctgcatt tctgagtttc 1980
attctcctgc ctgtagcagt gagaaaaagc tctgtcctc ccatcccctg gactgggagg 2040
tagataggta aataccaagt atttattact atgactgtct cccagccctg gctctgcaat 2100
gggcactggg atgagccgct gtgagcccct ggtcctgagg gtccccacct gggacccttg 2160
agagtatcag gtctcccacg tgggagacaa gaaatccctg tttaatattt aaacagcagt 2220
gttccccatc tgggtccttg caccctcac tctggectca gccgactgca cagcggcccc 2280
tgcattcccct tggctgtgag gccctggac aagcagagggt ggccagagct gggaggcatg 2340
gccctggggt cccacgaatt tgctgggaa tctcgttttt cttcttaaga cttttgggac 2400
atggtttgac tcccgaacat caccgacgtg tctcctgttt ttctgggtgg cctcgggaca 2460
cctgccctgc ccccacgagg gtcaggactg tgactctttt tagggccagg cagggtgcctg 2520
gacatttgcc ttgctggatg gggactgggg atgtgggagg gagcagacag gaggaatcat 2580
gtcaggccctg tgtgtgaaag gaagctccac tgtaccctc cacctcttca cccccactc 2640
accagtgtcc cctccactgt cacattgtaa ctgaacttca ggataataaa gtgtttgcct 2700
ccagtcacgt ctttctcct tcttgagtc agctgggtgcc tggccagggg ctggggagggt 2760
ggctgaaggg tgggagaggc cagagggagg tcggggagga ggtctgggga ggaggtccag 2820
ggaggaggag gaaagtctc aagttcgtct gacattcatt ccgttagcac atatttatct 2880
gagcacctac tctgtgcaga cgctgggcta agtgctgggg acacagcagg gaacaaggca 2940
gacatggaat ctgcactega
<210> 14

```

<211> 850

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (3) .. (4)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (9) .. (9)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (11)..(11)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (18)..(18)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (202)..(202)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (205)..(205)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (273)..(273)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (327)..(327)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (367)..(367)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (581)..(581)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (599)..(599)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (628)..(628)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (673)..(673)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (675)..(675)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (682)..(682)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (693)..(693)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (698)..(698)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (700)..(700)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (720)..(720)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (730)..(730)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (734)..(734)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (742)..(743)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (746)..(746)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (748)..(748)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (752)..(752)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (762)..(762)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (767)..(767)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (777)..(777)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (783)..(784)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (789)..(789)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (794)..(794)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (797)..(798)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (803)..(805)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (810)..(810)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (817)..(817)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (826)..(827)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (831)..(832)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (834)..(834)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (837)..(838)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (840) .. (840)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (844) .. (844)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (846) .. (848)

<223> n=a, c, g or t

<400> 14

ttnnctttnt	ngccatgncc	agttcaactc	agcctctcag	ttccacacgg	acaacatgcg	60
ggaccctctg	aaccgagtec	tggccaaact	gttcctgctc	atctcctcca	tcctggggtc	120
tcgcaccgct	ggcccccaca	cccagttcgt	gcagtgggtc	atggaggagt	gtgtggactg	180
cctggagcag	ggtggccgtg	gnagngtcct	gcagttcatg	cccttcacca	ccgtgtcgga	240
actggtgaag	gtgtcagcca	tgtctagccc	canggtgggt	ctggccatca	cggacctcag	300
cctgccccctg	ggccgccagg	tggctgntaa	agccattgct	gcactctgag	gggcttggca	360
tggccgnagt	gggggctggg	gactggcgca	gccccaggcg	cctccaaggg	aagcagtgag	420
gaaagatgag	gcacgtgcc	tcacatccgt	tccacatggt	gcaagagcct	ctagcggtt	480
ccagttcccc	gctcctgact	cctgactcca	ggatgtctcc	cggtttcttc	ttttcaaaat	540
tttcctctcc	atcttgctgg	caactgagga	gagtgagcag	nctggaccac	aagcccagng	600
ggtcacccct	gtgttgcgcc	cgcccagncc	aggagtagtc	ttacctcttg	aggaactttc	660
ttggatggaa	agngngtttt	tntgtgttgt	gtntgtgnan	gtgtttttcg	gggttttttn	720
gggcaatatn	ttangggaaat	cnmccntncc	cncatttttt	cnttagagct	ccccggngga	780
aanntcttna	tcenctnnct	ttnnnctccn	tcacctncc	tctttnttct	nntntnnncc	840
tcnccnnncc						850

<210> 15

<211> 2309

<212> DNA

<213> Homo sapiens

<400> 15

ccccgggcgc	aggaggcggg	cgccccggcc	ccaccggccc	cccatggacg	ccccagcac	60
ggggcgctga	gacccccgcg	tcgctgccc	gcccgggtccg	gcgcgccacg	ccagggatct	120
ctggacagga	caagactccg	aagctactcc	cccagcacac	agcccgggac	ccacaaaccc	180
agcttgcccc	cagccctccc	acctgccact	ccctggcccc	tcccaccgcc	cgccccctt	240
ggggcgcgagg	gcatgggtgtg	aaaggccaag	tgctgaggcg	ggtatcatgg	gtgctgtgcc	300
ctagggcctg	ggtggcgagg	ggtgggtggc	ctgtgggtgt	gccggggggg	ccagtgtgcc	360
caccccagtc	tcttgccgtg	ctggagggca	tcttgatgg	aattgaagtg	aatggaacag	420
aagccaagca	aggtggagtg	tgggtcagac	ccagaggaga	acagtgccag	gtcaccagat	480
ggaaagcgaa	aaagaaagaa	cggccaatgt	tccctgaaaa	ccagcatgtc	agggatatatc	540
cctagttacc	tggacaaaga	cgagcagtg	gtcgtgtgtg	gggacaaggc	aactggttat	600
cactaccgct	gtatcacttg	tgagggtgc	aagggttct	ttcgccgcac	aatccagaag	660

aacctccatc	ccacctattc	ctgcaaatat	gacagctgct	gtgtcattga	caagatcacc	720
cgcaatcagt	gccagctgtg	ccgcttcaag	aagtgcacg	ccgtgggcat	ggccatggac	780
ttggttctag	atgactcgaa	gcgggtggcc	aagcgtaaag	tgattgagca	gaaccgggag	840
cggcggcgga	aggaggagat	gatccgatca	ctgcagcagc	gaccagagcc	cactcctgaa	900
gagtgggatc	tgatccacat	tgccacagag	gcccatcgca	gcaccaatgc	ccagggcagc	960
cattggaaac	agaggcggaa	attcctgccc	gatgacattg	gccagtcacc	cattgtctcc	1020
atgccggacg	gagacaaggt	ggacctggaa	gccttcagcg	agttttaccaa	gatcatcacc	1080
ccggccatca	cccgtgtggt	ggactttgcc	aaaaaactgc	ccatgttctc	cgagctgcct	1140
tgccaagacc	agatcatcct	cctgaagggg	tgctgcatgg	agatcatgtc	cctgcgggcg	1200
gctgtccgct	acgacctga	gagcgacacc	ctgacgctga	gtggggagat	ggctgtcaag	1260
cgggagcagc	tcaagaatgg	cggcctgggc	gtagtctccg	acgccatctt	tgaactgggc	1320
aagtcactct	ctgcctttaa	cctggatgac	acggaagtgg	ctctgctgca	ggctgtgctg	1380
ctaattgtcaa	cagaccgctc	gggcctgctg	tgtgtggaca	agatcgagaa	gagtcaggag	1440
gcgtacctgc	tggcgttcga	gcactacgtc	aaccaccgca	aacacaacat	tccgcacttc	1500
tgccccaagc	tgctgatgaa	ggagagagaa	gtgcagagtt	cgattctgta	caagggggca	1560
gcggcagaag	gccggccggg	cgggtcactg	ggcgtccacc	cgggaaggaca	gcagcttctc	1620
ggaatgcatg	ttgttcaggg	tccgcaggtc	cggcagcttg	agcagcagct	tggtgaagcg	1680
ggaagtctcc	aagggccggg	tcttcagcac	cagagcccga	agagcccga	gcagcgtctc	1740
ctggagctgc	tccaccgaag	cgggaattctc	catgcccgag	cgggtctgtg	ggaagacgac	1800
agcagtgaag	cggactcccc	gagctcctct	gaggaggaac	cggaggctctg	caggaccttg	1860
gcaggcaatg	cagcctctcc	ctgaagcccc	ccagaaggcc	gatggggaag	gagaaggagt	1920
gccatacctt	ctcccaggcc	tctgccccaa	gagcaggagg	tgcctgaaag	ctgggagcgt	1980
gggctcagca	gggctggtca	cctcccatcc	cgtaagacca	ccttcccttc	ctcagcaggc	2040
caaacatggc	cagactccct	tgctttttgc	tgtgtagtgc	cctctgcctg	ggatgccctt	2100
ccccctttct	ctgcctggca	acatcttact	tgctctttga	ggccccaact	caagtgctac	2160
ctccttcccc	agctccccca	ggcagaaata	gttgtctgtg	cttccttggt	tcatgtctct	2220
actgtgacac	ttatctcact	gttttataat	tagtcgggca	tgagtctgtt	teccaagcta	2280
gactgtgtct	gaatcatgtc	tgtatcccg				2309

<210> 16

<211> 2355

<212> DNA

<213> Homo sapiens

<400> 16

ccgttgctc	aacgtccaac	ccttctgcag	ggctgcagtc	cggccacccc	aagaccttgc	60
tgccaggtgc	ttcggatcct	gatcgtgagt	cgcgggggtc	actccccgcc	cttagccagt	120
gcccaggggg	caacagcggc	gatcgcaacc	tctagtttga	gtcaaggctc	agtttgaatg	180
accgctctca	gctggtgaag	acatgaccac	cctggactcc	aacaacaaca	caggtggcgt	240
catcacctac	attggctcca	gtggctcctc	cccaagccgc	accagccctg	aatccctcta	300
tagtgacaac	tcgaatggca	gcttccagtc	cctgacccaa	ggctgtccca	cctacttccc	360
accatcccc	actggctccc	tcacccaaga	cccggtctgc	tcctttggga	gcattccacc	420
cagcctgagt	gatgacggct	ccccttcttc	ctcatcttcc	tcgtcgtcat	cctcctcctc	480
cttctataat	gggagccccc	ctgggagtct	acaagtggcc	atggaggaca	gcagccgagt	540
gtcccccagc	aagagcacca	gcaacatcac	caagctgaat	ggcatggtgt	tactgtgtaa	600
agtgtgtggg	gacgttgcct	cgggcttcca	ctacggtgtg	ctcgctgctg	aggcctgcaa	660
gggctttttc	cgtcggagca	tccagcagaa	catccagtac	aaaagggtgc	tgaagaatga	720
gaattgctcc	atcgtccgca	tcaatcgcaa	ccgtcgccag	caatgtcgct	tcaagaagtg	780
tctctctgtg	ggcatgtctc	gagacgctgt	gcgttttggg	cgcatcccca	aacgagagaa	840
gcagcggatg	cttgcctgaga	tgacagtgct	catgaacctg	gccaacaacc	agttgagcag	900
ccagtgcocg	ctggagactt	cacccaccca	gcacccaccc	ccaggcccca	tgggcccttc	960
gccacccccc	gctccgggtc	cctcacccct	ggtgggcttc	tcccagtttc	cacaacagct	1020
gacgcctccc	agatccccaa	gccctgagcc	cacagtggag	gatgtgatat	cccaggtggc	1080
ccgggcccct	cgagagatct	tcacctacgc	ccatgacaag	ctgggcagct	cacctggcaa	1140
cttcaatgac	aaccatgcat	caggtagccc	tccagccacc	acccacatc	gctgggaaaa	1200
tcagggtctg	ccacctgccc	ccaatgacaa	caacaccttg	gctgcccage	gtcataacga	1260
ggccctaaat	ggtctgcgcc	aggctccctc	ctcctacctc	cccacctggc	ctcctgcccc	1320
tgacacccac	agctgccacc	agtccaacag	caacgggcac	cgtctatgcc	ccaccacgct	1380
gtatgcagcc	ccagaaggca	aggcacctgc	caacagtcct	cggcagggca	actcaaagaa	1440
tgttctgctg	gcatgtccta	tgaacatgta	cccgcattga	cgagtgggc	gaacggtgca	1500
ggagatctgg	gaggatttct	ccatgagctt	cacgcccgtc	gtgcgggagg	tggtagagtt	1560
tgccaaacac	atcccgggct	tccgtgacct	ttctcagcat	gaccaagtc	ccctgcttaa	1620

ggctggcacc	tttgaggtgc	tgatgggtgcg	ctttgcttcg	ttgttcaacg	tgaaggacca	1680
gacagtgatg	ttcctaagcc	ggaccaccta	cagcctgcag	gagcttgggtg	ccatggggcat	1740
gggagacctg	ctcagtgcc	tggtcgactt	cagcgagaag	ctcaactccc	tgccgcttac	1800
cgaggaggag	ctgggcctct	tcaccgcggt	gggtgcttgc	tctgcagacc	gctcggggcat	1860
ggagaattcc	gcttcgggtg	agcagctcca	ggagacgctg	ctgcgggctc	ttcgggctct	1920
gggtgctgaag	aaccggccct	tgagagacttc	ccgcttcacc	aagctgctgc	tcaagctgcc	1980
ggacctgcgg	accctgaaca	acatgcattc	cgagaagctg	ctgtccttcc	gggtggacgc	2040
ccagtgacct	gcccggccgg	ccttctgccc	ctgccccctt	gtacagaatc	gaactctgca	2100
cttctctctc	ctttacgaga	cgaaaaggaa	aagcaaacca	gaatcttatt	tatattgtta	2160
taaaatatcc	caagatgagc	ctctggcccc	ctgagccttc	ttgtaaatac	ctgcctccct	2220
cccccatcac	cgaacttccc	ctcctcccct	atttaaacca	ctctgtctcc	cccacaaccc	2280
tcccctggcc	ctctgatttg	ttctgttcc	gtctcaaatc	caatagttca	cagctaaaaa	2340
aaaaaaaaaa	aaaag					2355

<210> 17

<211> 4119

<212> DNA

<213> Homo sapiens

<400> 17

gaattccggt	gctgtcgac	acacacacac	acacacacac	acaccccaac	acacacacac	60
acaccccaac	acacacacac	acacacacac	acacacacac	acacacacac	acacagcggg	120
atggccgagc	gccgcacgcg	tagcacgcgc	ggactagcta	tccagcctcc	cagcagcctc	180
tgcgacgggc	gcggtgcgta	agtacctcgc	cggtggtggc	cgttctccgt	aagatggcgg	240
accggcggcg	gcagcgcgct	tcgcaagaca	ccgaggacga	ggaatctggg	gcttcgggct	300
ccgacagcgg	cggctccccg	ttgcggggag	gcgggagctg	cagcggtagc	gccggaggcg	360
gcggcagcgg	ctctctgcct	tcacagcgcg	gaggccgaac	cggggccctt	catctcgggc	420
gggtggagag	cgggggcgccc	aagagtgcgt	aggagtgcga	gtgtgagagt	gaagatggca	480
ttgaagggtga	tgctgttctc	tcggattatg	aaagtgcaga	agactcggaa	ggtgaagaag	540
gtgaatacag	tgaagaggaa	aactccaaag	tggaagtcaa	atcagaagct	aatgatgctg	600
ttaattcttc	aacaaaagaa	gagaagggag	aagaaaagcc	tgacaccaa	agcactgtga	660
ctggagagag	gcaaaagtggg	gacggacagg	agagcacaga	gcctgtggag	aacaaagtgg	720
gtaaaaaggg	ccctaagcat	ttggatgatg	atgaagatcg	gaagaatcca	gcatacatat	780
ctcggaagg	gctcttcttt	gagcatgatc	ttcgagggca	aactcaggag	gaggaaagtca	840
gacccaagg	gcgtcagcga	aagctatgga	aggatgaggg	tcgctgggag	catgacaagt	900
tccgggaaga	tgagcaggcc	ccaaagtccc	gacaggagct	cattgtctct	tatggttatg	960
acattcgtct	agtcataaat	ctgatgaca	tcaaacctcg	aagaatccgg	aaaccccgat	1020
atgggagctc	tccacaaaga	gatccaaact	ggaacgggtga	gcggctaacc	aagtctcatc	1080
gccaccaggg	tcttgggggc	accctaccac	caaggacatt	tattaacagg	aatgctgcag	1140
gtaccggcgc	tatgtctgca	cccaggaatt	attctcgatc	tgggggcttc	aaggaaaggtc	1200
gtgctggttt	taggcctgtg	gaagctgggt	ggcagcatgg	tggccggtct	ggtgagactg	1260
ttaagcatga	gattagttac	cggtcacggc	gcctagagca	gacttctgtg	agggatccat	1320
ctccagaagc	agatgctcca	gtgcttgcca	gtcctgagaa	ggaagaggca	gcctcagagc	1380
caccagctgc	tgctcctgat	gctgcaccac	caccocctga	tagggccatt	gagaagaaat	1440
cctattcccc	ggcaagaaga	actgaacca	aagtgggaga	tgagtcagag	cttgacagag	1500
aggtgcccc	tcctcctgaa	ggactgattc	cagcacctcc	agtcccagaa	accaccccaa	1560
ctccacctac	taagactggg	acctgggaag	ctccgggtgga	ttctagtaca	agtggacttg	1620
agcaagatgt	ggcacaacta	aatatagcag	aacagaattg	gagtcggggg	cagccttctt	1680
tcctgcaacc	acgggaactt	cgaggtatgc	ccaaccatat	acacatggga	gcaggacctc	1740
cacctcagtt	taaccggatg	gaagaaatgg	gtgtccaggg	tggtcgagcc	aaacgctatt	1800
catcccagcg	gcaaagacct	gtgccagagc	cccccgcccc	tccagtgcac	atcagtatca	1860
tggagggaca	ttactatgat	ccactgcagt	tccagggacc	aatctatacc	catggtgaca	1920
gccctgcccc	gctgcctcca	cagggcagtc	ttgtgcagcc	aggaatgaac	cttccccacc	1980
caggtttaca	tccccaccag	acaccagctc	ctctgcccc	tccaggcctc	tatccccacc	2040
cagtgtccat	gtctccagga	cagccaccac	ctcagcagtt	gcttgcctct	acttactttt	2100
ctgtccagg	cgtcatgaac	tttgtaatc	ccagttaccc	ttatgctcca	ggggcactgc	2160
ctccccacc	accgctcat	ctgtatccta	atacagagc	cccatcacag	gtatgtggag	2220
gagtgcacta	ctataacccc	gcccagcagc	aggtgcagcc	aaagccctcc	ccaccccgga	2280
ggactcccca	gccagtcacc	atcaagcccc	ctccacctga	ggttgtaagc	aggggttcca	2340
gttaatacaa	gtttctgaat	attttaaatc	ttaacatcat	ataaaaagca	gcagaggtga	2400
gaactcagaa	gagaaataca	gctggctatc	tactaccaga	agggcttcaa	agatataggg	2460
tgtggctcct	accagcaaac	agctgaaaga	ggaggacccc	tgcccttctc	tgaggacagg	2520

ctctagagag	agggagaaac	aagtggacct	cgtcccatct	tcactcttca	cttgagttgg	2580
ctgtgttcgg	gggagcagag	agagccagac	agccccaagc	ttctgagtct	agatacagaa	2640
gcccattgtct	tctgctgttc	ttcacttctg	ggaaattgaa	gtgtcttctg	ttcccaagga	2700
agctccttcc	tgtttgtttt	gttttctaag	atgttcattt	ttaaagcctg	gcttcttatc	2760
cttaatatata	ttttaatttt	ttctctttgt	ttctgtttct	tgctctctct	ccctgccttt	2820
aaatgaaaca	agtctagtct	tctgggtttc	tagccctctc	ggattccctt	ttgactcttc	2880
cgtgcatccc	agataatgga	gaatgtatca	gccagccttc	cccaccaagt	ctaaaaagac	2940
ctggcctttc	acttttagtt	ggcatttggt	atcctcttgt	atacttgtat	tcccttaact	3000
ctaaccctgt	ggaagcatgg	ctgtctgcac	agagggctcc	attgtgcaga	aaagctcaga	3060
gtaggtgggt	aggagccctt	ctctttgact	taggttttta	ggagtctgag	catccatcaa	3120
tacctgtact	atgatgggct	tctgttctct	gctgagggcc	aataccctac	tgtggggaga	3180
gatggcacac	cagatgcttt	tgtgagaaag	ggatggtgga	gtgagagcct	ttgcctttag	3240
gggtgtgtat	tcacatagtc	ctcagggtct	agtcttttga	ggtaagtgga	attagagggc	3300
cttgcttctc	ttctttccat	tcttcttgct	acaccctttt	tccagttgct	gtggaccaat	3360
gcactctctt	aaaggcaaat	attatccagc	aagcagtcta	ccctgtcctt	tgcaattgct	3420
cttctccacg	tctttcctgc	tacaagtgtt	ttagatgtta	ctaccttatt	ttccccgaat	3480
tctatttttg	tccttgacga	cagaatataa	aaactcctgg	gcttaaggcc	taaggaagcc	3540
agtcaccttc	tgggcaaggg	ctcctatctt	tcctccctat	ccatggcact	aaaccacttc	3600
tctgctgcct	ctgtggaaga	gattcctatt	actgcagtac	atacgtctgc	caggggtaac	3660
ctggccactg	tcctgtcctt	tctacagaa	ctgagggcaa	agatgggtgg	tgtgtctctc	3720
cccggtaatg	tcactgtttt	tattccttcc	atctagcagc	tggcctaata	actctgagtc	3780
acaggtgtgg	gatggagagt	ggggagaggg	acttaatctg	taacccccaa	ggaggaaata	3840
actaagagat	tcttctaggg	gtagctgggt	gttgtgcctt	ttgtaggtctg	ttccctttgc	3900
cttaaacctg	aagatgtctc	ctcaagcctg	tgggcagcat	gcccagattc	ccagacctta	3960
agacactgtg	agagttgtct	ctgttggtcc	actgtgttta	gttgcaagga	tttttccatg	4020
tgtgtgtggg	ttttttgtta	ctgttttaaa	gggtgcccat	ttgtgatcag	catttgtgact	4080
tggagataat	aaaattttaga	ctataaaactt	gaaaaaaaa			4119

<210> 18

<211> 2653

<212> DNA

<213> Homo sapiens

<400> 18

gagcgcggct	ggagtttgct	gctgccgctg	tgcagtttgt	tcaggggctt	gtggcgggtga	60
gtccgagagg	ctgcgtgtga	gagacgtgag	aaggatcctg	cactgaggag	gtggaaagaa	120
gaggattgct	cgaggaggcc	tggggtctgt	gagacagcgg	agctgggtga	aggctgcggg	180
ttccggcgag	gcctgagctg	tgctgtcgtc	atgcctcaaa	cccgatccca	ggcacaggct	240
acaatcagtt	ttccaaaaag	gaagctgtct	cgggcattga	acaaagctaa	aaactccagt	300
gatgccaaac	tagaaccaac	aaatgtccaa	accgtaacct	gttctcctcg	tgtaaaagcc	360
ctgcctctca	gcccaggaa	acgtctgggc	gatgacaacc	tatgcaacac	tccccattta	420
cctccttggt	ctccaccaaa	gcaaggcaag	aaagagaatg	gtccccctca	ctcacataca	480
cttaaggggac	gaagattggg	atttgacaat	cagctgacaa	ttaagtctcc	tagcaaaaga	540
gaactagcca	aagtccacca	aaacaaaata	ctttcttcag	ttagaaaaag	tcaagagatc	600
acaacaaatt	ctgagcagag	atgtccactg	aagaaagaat	ctgcatgtgt	gagactattc	660
aagcaagaag	gcacttgcta	ccagcaagca	aagctggctc	tgaacacagc	tgtcccagat	720
cggctgcctg	ccaggggaaag	ggagatggat	gtcatcagga	atttcttgag	ggaacacatc	780
tgtgggaaaa	aagctggaag	cctttacctt	tctgggtgctc	ctggaactgg	aaaaactgcc	840
tgcttaagcc	ggattctgca	agacctcaag	aaggaaactga	aaggctttta	aactatcatg	900
ctgaattgca	tgtccttgag	gactgcccag	gctgtattcc	cagctattgc	tcaggagatt	960
tgtcaggaag	aggtatccag	gccagctggg	aaggacatga	tgaggaaatt	ggaaaaacat	1020
atgactgcag	agaaggggcc	catgattgtg	tgggtattgg	acgagatgga	tcaactggac	1080
agcaagggcc	aggatgtatt	gtacacgcta	tttgaatggc	catggctaag	caattctcac	1140
ttggtgctga	ttggtattgc	taataccctg	gatctcacag	atagaattct	acctaggctt	1200
caagctagag	aaaaatgtaa	gccacagctg	ttgaacttcc	caacttatac	cagaaatcag	1260
atagtcacta	ttttgcaaga	tcgacttaat	caggtatcta	gagatcaggt	cttggacaat	1320
gtctgcagttc	aattctgtgc	ccgcaaagtc	tctgtgtttt	caggagatgt	tcgcaagaca	1380
ctggatgttt	gcaggagagc	tattgaaatt	gtagagtcag	atgtcaaaaag	ccagactatt	1440
ctcaaacacc	tgtctgaatg	taaatcacct	tctgagcctc	tgattcccaa	gagggttggg	1500
cttatttcaca	tatcccaagt	catctcagaa	gttgatggta	acaggatgac	cttgagccaa	1560
gaggggagcac	aagattcctt	ccctcttcag	cagaagatct	tggtttgctc	tttgatgctc	1620
ttgatcaggc	agttgaaaaat	caaagaggctc	actctggggga	agttatatga	agcctacagt	1680

aaagtctgtc	gcaaacagca	ggtggcggt	gtggaccagt	cagagtgttt	gtcactttca	1740
gggctcttgg	aagccagggg	catttttagga	ttaaagagaa	acaaggaaac	ccgtttgaca	1800
aaggtgtttt	tcaagattga	agagaaagaa	atagaacatg	ctctgaaaga	taaagcttta	1860
attggaaata	tcttagctac	tggattgcct	taaattcttc	tcttacaccc	caccggaaag	1920
tattcagctg	gcatttagag	agctacagtc	ttcattttag	tgctttacac	attcgggcct	1980
gaaaacaaat	atgacctttt	ttacttgaag	ccaatgaatt	ttaatctata	gattctttta	2040
tatttagcaca	gaataatatc	tttgggtcct	actattttta	cccataaaaag	tgaccaggta	2100
gacctttttt	aattacattc	actacttcta	ccacttgtgt	atctctagcc	aatgtgcttg	2160
caagtgtaca	gatctgtgta	gaggaatgtg	tgtatattta	cctcttcgtt	tgctcaaaca	2220
tgagtgggtg	ttttttgtt	tggttttttt	gttgtgtgtg	tttttgaggc	gcgtctcacc	2280
ctgttgccca	ggctggagtg	caatggcgcg	ttctctgctc	actacagcac	ccgcttccca	2340
ggttgaagtg	attctcttgc	ctcagcctcc	cgagtagctg	ggattacagg	tgcccaccac	2400
cgcgcccagc	taatttttta	attttttagta	gagacagggt	tttaccatgt	tgggcaggct	2460
ggtcttgaac	tcttgacct	caagtgatct	gccaccttg	gcctccctaa	gtgctgggat	2520
tataggcgtg	agccaccatg	ctcagccatt	aaggtatttt	gttaagaact	ttaagtttag	2580
ggtaagaaga	atgaaaatga	tccagaaaaa	tgcaagcaag	tccacatgga	gatttggagg	2640
acactgggtta	aag					2653

<210> 19

<211> 2907

<212> DNA

<213> Homo sapiens

<400> 19

gccatctggg	cccaggcccc	atgccccgag	gaggggtggt	ctgaagccca	ccagagcccc	60
ctgccagact	gtctgcctcc	cttctgactg	tggcgccttg	gcatggccag	caacagcagc	120
tcctgcccca	cacctggggg	cgggcacctc	aatgggtacc	cgggtgcctcc	ctacgccttc	180
ttcttcccc	ctatgctggg	tggactctcc	cgcgcaggcg	ctctgaccac	tctccagcac	240
cagcttccag	ttagtgagata	tagcacacca	tccccagcca	ccattgagac	ccagagcagc	300
agttctgaag	agatagtgcc	cagccctccc	tcgccacccc	ctctaccccg	catctacaag	360
ccttgctttg	tctgtcagga	caagtcccca	ggctaccact	atggggtcag	cgcctgtgag	420
ggctgcaagg	gcttcttccg	ccgcagcatc	cagaagaaca	tgggtgtacac	gtgtcacccg	480
gacaagaact	gcatcatcaa	caaggtgacc	cggaaaccgt	gccagtactg	ccgactgcag	540
aagtgccttg	aagtgggcat	gtccaaggag	tctgtgagaa	acgaccgaaa	caagaagaag	600
aaggaggtgc	ccaagcccga	gtgctctgag	agctacacgc	tgacgccgga	ggtgggggag	660
ctcattgaga	aggcgcccaa	agcgaccaga	gaaaccttcc	ctgccctctg	ccagctgggc	720
aaatacacta	cgaacaacag	ctcagaacaa	cgtgtctctc	tggacattga	cctctgggac	780
aagtccagtg	aactctccac	caagtgcata	attaagactg	tggagtccgc	caagcagctg	840
cccggttcca	ccacctccac	catcgccgac	cagatcaccc	tcctcaaggc	tgccctgcctg	900
gacatcctga	tcctgcggat	ctgcacgcgg	tacacgcccc	agcaggacac	catgaccttc	960
tcggagcgcc	tgacctgaa	ccggaccagg	atgcacaacg	ctggcttcgg	ccccctcacc	1020
gacctgggtc	ttgccttcgc	caaccagctg	ctgccccctg	agatggatga	tgcgagagac	1080
gggtgctca	gcgccatctg	cctcatctgc	ggagaccgcc	aggacctgga	gcagccggac	1140
cgggtggaca	tgctgcagga	gccgctgctg	gaggcgctaa	aggtctacgt	gcggaagcgg	1200
aggcccagcc	gccccacat	gttccccaa	atgctaata	agattactga	cctgcgaagc	1260
atcagcgcca	agggggctga	cgggtgatac	acgctgaaga	tggagatccc	gggctccatg	1320
ccgctctcca	tccaggaaat	gttgagagaa	tcagagggcc	tggacactct	gagcgggacag	1380
ccgggggggtg	gggggcggga	cgggggtggc	ctggcccccc	cgcagggcag	ctgtagcccc	1440
agcctcagcc	ccagctccaa	cagaagcagc	ccggccaccc	actccccgtg	accgcccacg	1500
ccacatggac	acagccctcg	ccctccgccc	cggcttttct	ctgcctttct	accgaccatg	1560
tgaccccgca	ccagccctgc	ccccacctgc	cctcccgggc	agtactgggg	accttccctg	1620
ggggacgggg	agggaggagg	cagcgactcc	ttggacagag	gcctgggccc	tcagtggact	1680
gcctgctccc	acagcctggg	ctgacgtcag	aggccgaggc	caggaactga	gtgaggcccc	1740
tggctcctgg	tctcaggatg	ggtcctgggg	gcctcgtgtt	catcaagaca	ccctctctgc	1800
cagctcacca	catcttcatc	accagcaaac	gccaggactt	ggctccccca	tcctcagaac	1860
tcacaagcca	ttgctcccca	ctcggggaac	ctcaacctcc	ccctgccttc	ggttggtgac	1920
agaggggggtg	ggacaggggc	gggggggttc	ccctgtacat	accctgccat	accaacccca	1980
ggtattaatt	ctcgtctggt	ttgtttttat	tttaattttt	ttgttttgat	ttttttaata	2040
agaattttca	ttttaagcac	atttatactg	aaggaaattg	tgctgtgtat	tgggggggagc	2100
tggatccaga	gctggagggg	gtgggtccgg	gggagggagt	ggctcggaag	gggccccccac	2160
tctctcttca	tgtccctgtg	ccccccagtt	ctctcctcca	gccttttctc	ctcagttttt	2220
ctcttttaaaa	ctgtgaagta	ctaactttcc	aaggcctgcc	ttccccctcc	tcccactgga	2280

gaagccgcca	gcccctttct	ccctctgcct	gaccactggg	tgtggacggt	gtggggcagc	2340
cctgaaagga	caggctcctg	gccttggcac	ttgcctgcac	ccaccatgag	gcatggagca	2400
gggcagagca	agggcccccg	gacagagttt	tcccagacct	ggctcctcgg	cagagctgcc	2460
tcccgtcagg	gcccacatca	tctaggctcc	ccagccccc	ctgtgaaggg	gctggccagg	2520
ggcccagact	gccccaccc	ccggcctcag	ccaccagcac	ccccataggg	ccccagaca	2580
ccacacacat	gcgcgtgcgc	acacacacaa	acacacacac	actggacagt	agatggggccg	2640
acacacactt	ggcccagatt	cctccatttc	cctggcctgc	ccccacccc	caacctgtcc	2700
cacccccgtg	ccccctcctt	accccgcagg	acgggcctac	aggggggtct	cccctcacc	2760
ctgcaccccc	agctggggga	gctggctctg	ccccgacctc	cttcaccagg	ggttggggcc	2820
ccttcccctg	gagcccgtgg	gtgcacctgt	tactgttggg	ctttccactg	agatctactg	2880
gataaagaat	aaagttctat	ttattct				2907

<210> 20

<211> 2096

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (23)..(23)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (27)..(27)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (80)..(80)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (120)..(120)

<223> n=a, c, g or t

<400> 20

agatgtttta	aaatactttg	atnctcngtt	tccacctctc	ttaaattgtc	tttccctatg	60
ttaaataatac	agtcatac	ttgtgaaaa	aagttcgcaa	tgagaacaat	catctaaaa	120
tggctgtaac	taggtcaggc	gcggttgctc	atgcctgtaa	tcccaccact	ttgggaggcc	180
gaggcaattg	gatcacctga	ggtcaggatt	ttgagaccag	cttgaccaac	atgggtggaat	240
cccatctcta	ctaaaaatac	aaaaaattag	ccgggtgtgg	tggcacaccc	ctgtaatccc	300
acctactcag	gaggctgagg	caggaaaaatc	ccttgaaccc	aggaggcaaa	ggttgcatgg	360
agccgaaata	acaccactgc	actccagcct	ggacgataga	gtgagacccc	atctcaaaaa	420
aagagcagct	gtgacaaatg	cctgtattga	attgcagggtc	agtcttccac	ctccactacc	480

ggtgccaaaa	aaagggctgc	cccaaaagga	actaaaaggg	atccagcttt	gaattctcgt	540
gtctctcaaa	agcctgatcc	tgccaaaacc	aagaatcgcc	gcaaaaggaa	gccatccact	600
tctgatgatt	ctgactctaa	ttttgagaaa	attgtttcga	aagcagtcac	aagcaagggtg	660
agtgttgatc	ctagtcagtc	cttttgctgt	agatgttctg	aaacacgtaa	ctaagccatt	720
gttcttaaaa	atttggcata	tctttaagaa	aattaactct	catattctgt	tagcttttac	780
tgtacatatt	tagttttaac	aaagttaa	atgccactta	tttggccaat	ggaagagttg	840
gccttagatc	tgcttcttat	tacttggtag	aaaatagaaa	actccttgaa	tatagtgtct	900
tgatacattt	ttttacatta	caattatggt	gtcagattta	caatgtgcaa	gttacctggg	960
ctttctctct	ttagaaatcc	aagggggaga	gtgatgactt	ccatatggac	tttgactcag	1020
ctgtggctcc	tcggggcaaaa	tctgtacggg	caaagaaacc	tataaagtac	ctggaagagt	1080
cagatgaaga	tgatctgttt	taaaatgtga	ggcgattatt	ttaagtaatt	atcttaccaa	1140
gccaagact	ggttttaag	ttacctgaag	ctcttaactt	cctcccctct	gaatttagtt	1200
tggggaaggt	gttttttagta	caagacatca	aagtgaagta	aagcccaagt	gttcttttagc	1260
tttttataat	actgtataaa	tagtgacct	ctcatgggca	ttgttttctt	ctctgctttg	1320
tctgtgtttt	gagtcgtctt	cttttgtctt	taaaacctga	tttttaagtt	cttctgaa	1380
gtagaaatag	ctatctgac	acttcagcgt	aaagcagtg	gtttattaac	catccactaa	1440
gtaaaacta	gagcagtttg	atttaaaagt	gtcactcttc	ctccttttct	actttcagta	1500
gatatgagat	agagcataat	tatctgtttt	atcttagttt	tatacataat	ttaccatcag	1560
atagaacttt	atggttctag	tacagatact	ctactacact	cagcctctta	tgtgccaagt	1620
ttttctttta	gcaatgagaa	attgctcatg	ttcttcatct	tctcaaatca	tcagaggccg	1680
aagaaaaaca	ctttggctgt	gtctataact	tgacacagtc	aatagaatga	agaaaattag	1740
agtagttatg	tgattatttc	agctcttgac	ctgtcccctc	tggtgcctc	tgagtctgaa	1800
tctcccaaag	agagaaacca	atttctaaga	ggactggatt	gcagaagact	cggggacaac	1860
atgtgatcca	agatcttaaa	tggtatatgt	ataaccatgc	tcagcaatga	gctattagat	1920
tcattttggg	aaatctccat	aatttcaatt	tgtaaaactt	gttaagacct	gtctacattg	1980
ttatatgtgt	gtgacttgag	taatgttatc	aacgtttttg	taaaatattt	ctatgttttt	2040
ctattagcta	aattccaaca	attttgtact	ttaataaaat	gttctaaaca	ttgaaa	2096

<210> 21

<211> 2160

<212> DNA

<213> Homo sapiens

<400> 21

agccccctgc	ccctcgccgc	ccccgcgcgc	ctgcctgggc	cggggccgag	atgccccgca	60
gcgcctcgcc	ggccaggctt	gctcccctcc	ggcacgcctg	ctaacttccc	ccgctacgtc	120
cccgttcgcc	cgccgggccc	ccccgtctcc	ccgcggcctc	cgggtccggg	tcctccagga	180
cggccaggcc	gtgccgccgt	gtgccctccg	ccgctcgccc	gcgcgcgcgc	cgctcccgc	240
ctgcgccag	cgccccgcgc	ccgcgcccga	gtcctcgggc	ggtccatgct	gccccctctc	300
ctcgtggccg	ccctgctgct	ggccgcgcgg	cccgggccga	gcctgggcga	cgaagccatc	360
cactgcccg	cctgctccga	ggagaagctg	gcgcgtgcc	gccccccgt	gggctgcgag	420
gagctggtgc	gagaggcggg	ctgcggctgt	tgccgcaact	gcgcctggg	cttggggatg	480
ccctgcgggg	tgtacacccc	ccgttgccgc	tcgggcctgc	gctgctaccc	gccccgagg	540
gtggagaagc	ccctgcacac	actgatgcac	gggcaaggcg	tgtgcatgga	gctggcggag	600
atcgaggcca	tccaggaaa	cctgcagccc	tctgacaagg	acgagggtga	ccaccccaac	660
aacagcttca	gccccgtgag	cgcccatgac	cgcagggtgc	tgcaagaagca	cttcgccaaa	720
attcgagacc	ggagcaccag	tgggggcaag	atgaagggtca	atggggcgcc	ccgggaggat	780
gcccggcctg	tgccccagg	ctcctgccag	agcgagctgc	accgggcgct	ggagcggctg	840
gccgcttcac	agagccgcac	ccacgaggac	ctctacttca	tccccatccc	caactgcgac	900
cgcaacggca	acttccaccc	caagcagtg	cacccagctc	tggatgggca	gcgtggcaag	960
tgctggtgtg	tggaccggaa	gacgggggtg	aaagctcccg	ggggcctgga	gccaaagggg	1020
gagctggact	gccaccagct	ggctgacagc	tttcgagagt	gaggcctgcc	agcaggccag	1080
ggactcagcg	tcccctgcta	ctcctgtgct	ctggaggctg	cagagctgac	ccagagtggg	1140
gtctgagctc	gagtcctgtc	tctgcctgcg	gcccagaagt	ttccctcaaa	tgcgcgtgtg	1200
cacgtgtgct	tgtgcgtgct	tgtgtgtgtg	tttgtgagca	tgggtgtgct	cttggggtaa	1260
gccagagcct	ggggtgttct	ctttgggtgt	acacagccca	agaggactga	gactggcact	1320
tagcccaaga	ggtctgagcc	ctgggtgtgt	tccagatcga	tcctggattc	actcactcac	1380
tcattccttc	actcatccag	ccacctaaaa	acatttactg	accatgtact	acgtgccagc	1440
tctagttttc	agccttggga	ggttttatct	tgacttcctc	tgattttggc	atgtggagac	1500
actcctataa	ggagagtcca	agcctgtggg	agtagaaaaa	tctcattccc	agagtcagag	1560
gagaagagac	atgtaccttg	accatcgctc	ttcctctcaa	gctagcccag	aggggtggag	1620
cctaaggaag	cgtggggtag	cagatggagt	aatggtcacg	aggtccagac	ccactcccaa	1680

agctcagact	tgccaggctc	cctttctctt	cttccccagg	tccttccttt	aggtctggtt	1740
gttgcacccat	ctgcttggtt	ggctggcagc	tgagagccct	gctgtgggag	agcgaagggg	1800
gtcaaaggaa	gacttgaagc	acagagggct	agggaggttg	ggtacatttc	tctgagcagt	1860
caggggtggga	agaaagaatg	caagagtgga	ctgaatgtgc	ctaatggaga	agaccacagt	1920
gctaggggat	gaggggcttc	ctgggtcctg	ttccccacc	ccatttggtg	tcacagccat	1980
gaagtccacg	ggatgaacct	atccttcacg	tggtctcgctc	cctgtagctc	tgccctccctc	2040
tccatatctc	cttccccctac	acctcccccc	ccacacctcc	ctactccctc	gggcatcttc	2100
tggtcttgact	ggatggaagg	agacttagga	acctaccagt	tggtccatgat	gtcttttctt	2160

<210> 22

<211> 2215

<212> DNA

<213> Homo sapiens

ctgcagggag	ccatgattgc	accactgcac	tccagcctgg	gcaacagagt	gagaccatgt	60
ctcaagaaaa	aaaaaaaaaga	aagaaaccac	tgctctaggg	taaatcccag	ccagagttgg	120
agccacccag	ctaaactggc	ctgttttccc	tcatttcctt	ccccgaaggt	atgctgtgtg	180
caagatgagg	tcacggacga	ttacatcgga	gacaacacca	cagtggacta	cactttgttc	240
gagttcttgt	gctccaagaa	ggacgtgcgg	aactttaaag	cctggttcct	ccctatcatg	300
tactoccatc	tttgtttcgt	gggcctactg	ggcaatgggc	tggtcgtgtt	gacctatata	360
tatttcaaga	ggctcaagac	catgaccgat	acctacctgc	tcaacctggc	ggtggcagac	420
atcctcttcc	tcctgaccct	tccttctctg	gcctacagcg	cggccaagtc	ctgggtcttc	480
ggtgtccact	tttgcaagct	catctttgcc	atctacaaga	tgagcttctt	cagtggcatg	540
ctcctacttc	tttgcatcag	cattgaccgc	tacgtggcca	tcgtccaggc	tgctcagctg	600
caccgcacc	gtgcgccgt	ccttctcatc	agcaagctgt	cctgtgtggg	catctggata	660
ctagccacag	tgctctccat	cccagagctc	ctgtacagtg	acctccagag	gagcagcagt	720
gagcaagcga	tgcatgctc	tctcatcaca	gagcatgtgg	aggcctttat	caccatccag	780
gtggcccaga	tggtgatcgg	ctttctggtc	ccccgtctgg	ccatgagctt	ctgttacctt	840
gtcatctctg	gcacctgct	ccaggcacgc	aactttgagc	gcaacaaggc	catcaagggtg	900
atcatcgctg	tggtcgtggt	cttcatagtc	ttccagctgc	cctacaatgg	ggtgggtcctg	960
gcccagacgg	tggtccactt	caacatcacc	agtagcacct	gtgagctcag	taagcaactc	1020
aacatcgctt	acgacgtcac	ctacagcctg	gcctgcgtcc	gctgctgcgt	caaccctttc	1080
ttgtacgcct	tcacggcgct	caagttccgc	aacgatctct	tcaagctctt	caaggacctg	1140
ggctgcctca	gccaggagca	gctccggcag	tggtcttcct	gtcggcacat	ccggcgctcc	1200
tccatgagtg	tggtggccga	gaccaccacc	accttctccc	cataggcgac	tcttctgcct	1260
ggactagagg	gacctctccc	aggggtccctg	gggtggggat	agggagcaga	tgcaatgact	1320
caggacatcc	ccccgccaaa	agctgctcag	ggaaaagcag	ctctcccctc	agagtgcagg	1380
ccctgctcca	gaagtttagt	tcaccccctt	cccagctacc	tcaaccaatg	ccgaaaaaga	1440
cagggtgat	aagctaacac	cagacagaca	acactgggaa	acagaggcta	ttgtccccta	1500
aacccaaaaa	tgaaagtga	agtccagaaa	ctgttcccac	ctgctggagt	gaagggggcca	1560
aggaggggtg	gtgcaagggg	cgtgggagtg	gcctgaagag	tcctctgaat	gaaccttctg	1620
gcctcccaca	gactcaaagt	ctcagaccag	ctcttccgaa	aaccaggcct	tatctccaag	1680
accagagata	gtggggagac	ttcttggctt	gggtgagaaa	agcggacatc	agctgggtcaa	1740
acaaactctc	tgaacccctc	cctccatcgt	tttcttccat	gtcctccaag	ccagcgggaa	1800
tggtcagctg	cacgccgccc	taaaagcaca	ctcatcccct	cacttgccgc	gtcgcctccc	1860
caggctctca	acagggggaga	gtgtgggtgt	tcctgcaggg	caggccagct	gcctcccgct	1920
gatcaaagcc	acactctggg	ctccagagtg	gggatgacat	gcactcagct	cttggctcca	1980
ctgggatggg	aggagaggac	aagggaaatg	tcagggggcg	ggaggggtgac	agtggccgct	2040
caaggccacg	agcttggtct	ttgttctttg	tcacagggac	tgaaaaacctc	tcctcatgtt	2100
ctgctttcga	ttcggttaaga	gagcaacatt	ttaccacac	acagataaag	tttcccttgg	2160
aggaaacaac	agcttttaaaa	gaaaaaagaa	aaaaaaagct	tggttaagtca	agtag	2215

<210> 23

<211> 958

<212> DNA

<213> Homo sapiens

<400> 23
 ggggcccggac gcgagggggcg gggcgagggcg gggacaaagg gaagcgaagc cggagctgcy 60
 ggcgcttttt ctgcccggcg tgtctcagat tcattcttaa ggaactgaga acttaatctt 120
 ccaaaatgtc aaaaagacca tcttatgccc cactccccac cccagctcct gcaacacaaa 180
 tgcccagcac accagggttt gtgggataca atccatacag tcattctgcc tacaacaact 240
 acaggctggg agggaaacccg agcaccaaca gccgggtcac ggcatcctct ggtatcacga 300
 ttccaaaacc cccaaagcca ccagataagc cgctgatgcc ctacatgagg tacagcagaa 360
 aggtctggga ccaagtaaag gcttccaacc ctgacctaaa gttgtgggag attggcaaga 420
 ttattgggtgg catgtggcga gatctcactg atgaagaaa acaagaatat ttaaaccgaat 480
 acgaagcaga aaagatagag tacaatgaat ctatgaaggc ctatcataat tccccgcgt 540
 accttgctta cataaatgca aaaagtctgt cagaagctgc tttagaggaa gaaagtgcac 600
 agagacaatc tcgcatggag aaaggagaac cgtacatgag cattcagcct gctgaagatc 660
 cagatgatta tgatgatggc ttttcaatga agcatacagc caccgcccgt ttccagagaa 720
 accaccgct catcagtga attcttagtg agagtgtggg gccagacgtt cggtcagttg 780
 tcacaacagc tagaatgcag gtcctcaaac ggacggtcca gtccttaatg gttcatcagc 840
 gaaaactaga agctgaactt cttcaaatag aggaacgaca ccaggagaag aagaggaaat 900
 tcctggaaag cacagattca tttacaatg aacttaaaag gttgtgcggg ctgaaagt 958

<210> 24

<211> 6483

<212> DNA

<213> Homo sapiens

<400> 24
 aagcttctaa ttgcagttca accacctgtt acatatcttc aggaaaaaat cacaacctct 60
 caacttcaac ttctcttct ataaattaga aataacaata accacacctg taaccccagc 120
 actttgggag gccaaaggcag gcagatcaag aggtgaggag attgagacca tcctggctaa 180
 catgatgaaa ccctgtctct accaaaaaga caaaaaatta gccaggtagt gtggcacaca 240
 cctgtagtcc cagctactcg ggaggctgag gcaggagaat ggctgaacc cgggaggtgg 300
 agcttgcagt gagccgagat ggccgactg cactccagcc tgggagacag agcaagcctc 360
 cgtctaaaaa aaaaaaaga aagaaagaaa gaaagaaata aaagaaataa taataaccac 420
 cattctatc tcaacagctt gttctagaaa tttttaagc acagtatcac aaacagcact 480
 acataattgt aaaacatgta tgaatatata catccaaaca acagcaatgt catagcctat 540
 gggtagatat aatcttatac aatgtacca aatcccaatt tacttacta gacaaactgt 600
 tataccaaat tctgtacaca gtatatccaa gaaaatgtgt tgtttttatt gagaaactga 660
 acctagcttg ggaacacatg tgcacagtct agttcataat atttgggtgca agtatcattc 720
 tctaattatag atttcaattt ttgcaagcaa atttttactt gcaatcgtaa catatccaaa 780
 ttttcccttt ttactcaatc agaacttagt gtaaagtact acaagttagt tcttcggatt 840
 tcatgctaag aaaataatgc agattttctg cattattatg gtcttcacag aaaccttaac 900
 tatgatgaat ttaaaagtgc aaaataatcc aggataactt tatgatttca cattttttaa 960
 tgttaaaaaa aatgccatca ttaattagaa aattctaaaa tcattacttc cactttctta 1020
 ggcaaaatat caatatactc tcatttgcca aataaattaa aagatctcct acaaacacaa 1080
 tctcctaaat tgtgggttta tggctttaat gttttatgtg tggcaactat tgatgctagt 1140
 taaaatttta gaaactcttt ctttttgatt ccctacagtt gtctacaaga acctattgt 1200
 agcatgatcc tgccagactt tatactattt gttgtccaa ttaaaactgt ttaaaacatg 1260
 aatttgaaaa atcttatttt aactataatt ttgtagctga aacttttttt tctaaacttt 1320
 gcaaacattc tatgcaacct gaattagtgc tgagaaaatt ggatcttaat ggttgctcaa 1380
 tgttcttcaa caggtgaaaa gcataataaa acatgctcat ctgaactcca cccattttca 1440
 atttcaacat agcatacctc gtgtttatcc ttagggcaaa ttcaaaattg tacatattag 1500
 gattgggtat tactgaagat aattttatgca atcataagcc aaagatgcta agttggcaaa 1560
 aagaaaacaa tgtaagtaag caaactctaa cacatgtgga cacaccctct cagtatataa 1620
 aggcttgtca ctgtccttgg tagcaggcac tccctgggct aaacagcatc accatgtctg 1680
 ttcgatacag ctcaagcaag cactactctt cctcccgcag tggaggagga ggaggaggag 1740
 gaggatgtgg aggaggagga ggagtgtcat ccctaagaat ttctagcagc aaaggctccc 1800
 ttggtggagg atttagctca ggggggttca gtggtggctc ttttagccgt gggagctctg 1860
 gtgggggatg ctttgggggc tcatcagggt gctatggagg attaggagg tttgggtggag 1920
 gttagctttca tggaaagctat ggaagttagc gctttggtgg gagttatgga ggcagctttg 1980
 gagggggcaa tttcgagggt ggcagctttg gtgggggcag ctttgggtgga ggcggtttg 2040
 gtggaggcgg ctttggagga ggctttggtg gtggatttgg aggagatggg ggccttctct 2100
 ctggaaatga aaaagtaacc atgcagaatc tgaatgaccg cctggcttcc tacttgga 2160
 aagttcgggc tctggaagaa tcaaaactat agctggaagg caaaatcaag gagggtgatg 2220
 aaaagcatgg caactcacat cagggggagc ctcgtgacta cagcaaatat taaaaacca 2280

tcgatgacct	taaaaatcag	gtaagaggta	tttttaaate	cagctttaag	tatcttgtcc	2340
atgtaatcca	gacagatgaa	tcttaaatta	agcacaatgt	ggctgttcac	tatgcttacc	2400
catgttactt	tcttccttca	aaaataaccc	agtctcatca	aagataaaca	tctgtgaaac	2460
tatgggtcatg	gcaatcttca	tccagcaagt	gtgctacttg	tcttaagagg	atgggagatt	2520
tactaagcac	ttttgaggtt	ttaatgagca	tacaatgagt	ccacaggtaa	aatatgctag	2580
gctattttaca	aatgtagaaa	ctgaaaaaaa	aaatcatgat	atgaatcaga	acaaaatggt	2640
attcagactg	ataacaagcc	atatttcagta	ccaacatggc	aagaaaaata	aattttccag	2700
tatgaaaatg	ggacactgct	tgcttctaag	gaatttctga	attgtaccta	ttgtgtacca	2760
gttcagagtg	tattttattta	ttagtatttta	tcatgagtta	aacaaatgca	ggtgtgagtc	2820
agccaaagca	tggttgaaat	acatggaaat	cacatagtct	aaaagaggag	ggcacactta	2880
caggaatata	tctatataat	tccagttagt	tttcagaaag	gaataattcg	tgtacagaaa	2940
tacaagactg	gagaaattcc	aagagaacaa	ataattcaaa	gttaagtata	tgggtaagcc	3000
tgcaatattt	catattttaa	ataaaaaatt	ttcccaagat	tttgaagag	aacaacataa	3060
aagtgcagag	tgcatctatg	tcaactacaa	agccatatct	gcatctgacc	tcttctcaaa	3120
taactgtgcc	tctccctcca	gattctcaac	ctaacaactg	ataatgcaa	catcctgctt	3180
cagatcgaca	atgccaggct	ggcagctgat	gacttcaggc	tgaagtaagt	taagtgtctg	3240
ttgtataata	ctatcacac	gaatacatca	gtggttttta	acaatgactt	gggatgccct	3300
caataacatt	tacatttttc	tgaattcacc	caaagttaaa	tagtattgga	gttatctgag	3360
aaatttttcca	tgctcagtggt	accttttttg	caatatttaa	ggaagaaaat	gcataattaa	3420
gtaactgcta	aggttttttc	cattaaacca	ctattacttc	taagagaact	gtacatgaca	3480
aatattgcca	ttacatgaga	tcaactatgt	agttgctttt	taaatagtct	ctgccagat	3540
acatctcccc	tatataagtt	ataaccagta	ttgatcat	gcttggttca	ggtatgagaa	3600
tgaggtagct	ctgcgccaga	gcgtggaggc	tgacatcaac	ggcctgcgta	gggtgctgga	3660
tgagctgacc	ctgaccaagg	ctgacctgga	gatgcaaat	gagagcctga	ctgaagagct	3720
ggcctatctg	aagaagaacc	acgaggaggt	gacacaaaag	ttatactttt	cccagccaaa	3780
agagagttca	ttatggtcct	cgtgtagcca	ataaatcttt	ctggtcctca	aacagcaaat	3840
gaaagacctt	cgaaatgtgt	ccactgggtg	tgtgaatgtg	gaaatgaatg	ctgccccggg	3900
tggtgatctg	actcaacttc	tgaataacat	gagaagccaa	tatgaacaac	ttgctgaaca	3960
aaaccgcaaa	gatgctgaag	cctgggtcaa	tgaaaaggta	aagtaatctt	ccttatagtg	4020
aaactcatgg	aggtttttatc	atttcagaat	ttcctcacc	ttttccttgt	ttttaatact	4080
ctagagcaag	gaactgacta	cagaaattga	taataacatt	gaacagatat	ccagctataa	4140
atctgagatt	actgaattga	gacgtaatgt	acaagctctg	gagatagaac	tacagtccca	4200
actggccttg	gtatgttaac	tctcatgaaa	tgacttcaac	tttatcatac	aaagtttcat	4260
gctcacctaa	gaatatgcaa	tgcaacaaaa	aaatgcagag	ttggaggtaa	gaaagagaaa	4320
acaaagtga	gctcatgtta	atggaggaaa	agtactacta	gtgttgatct	aaaagtgtg	4380
aaactgaaat	ggtgccatta	aacatacaac	aaattctgtt	cattttctta	ttcttctata	4440
taatgcctta	ctaaataatc	aaataagcgt	caccatactc	aactgaacaa	ggaagtcact	4500
aagccacaaa	aaaatccgtt	tcagaaacaa	tccttggaag	cctccttgge	agaaacagaa	4560
ggtcgctact	gtgtgcagct	ctcacagatt	cacgcccgga	tatccgctct	ggaagaacag	4620
ttgcaacaga	ttcgagctga	aaccgagtg	cagaatactg	aataccaaca	actcctggat	4680
attaagatcc	gactggagaa	tgaaattcaa	acctaccgca	gcctgctaga	aggagaggga	4740
aggtaaat	taacatgaaa	agttatccca	gtttctttta	ttcaatatct	cagatagcaa	4800
ggcttatcta	aacccaaga	agatgccaga	gaatgagagg	aagggaggag	agagggtaga	4860
gtacagaaaa	aggagtacgc	aaccgcaatc	tcactttctc	atgaatttgg	cccaaatatga	4920
ttcttaagag	ttctgtgaac	ttaacattgt	tttcaaagga	tgggttttaa	aatatatacc	4980
tggcagggtt	ttattttttc	aacacgtttt	gcttattttt	taaatataacg	gcaactggaa	5040
agctaccac	cgtttttcaa	cgtttagagat	aaccgaatgt	gacctcacc	cgtttagttc	5100
cggaggcggc	ggacgcggcg	gcggaagttt	cggcggcggc	tacggcggcg	gaagctccgg	5160
cggcggaagc	tcggcgcgcg	gctacggcg	cggccacggc	ggcagttccg	gcggcggtta	5220
cggaggcgga	agctccggcg	gcggaagctc	cggcggcggc	tacggggcg	gaagctccag	5280
cggcgccac	ggcggcggaa	gctccagcgg	cggccacggc	ggcagttcca	gcggcggtta	5340
cgggtggtggc	agttccggcg	gcggcgcgcg	cggctacggg	ggcggcagct	ccggcgcgcg	5400
cagcagctcc	ggcggcggat	acggcgcgcg	cagctccagc	ggaggccaca	agtcctctct	5460
ttccgggtcc	gtggcgagat	cttcatctaa	gggaccaagg	tcagcagaaa	ctagctgggg	5520
taacttagaa	ttagttttta	cttctgtga	tgggtttttt	gcgctttaag	ctctagagtt	5580
gttttataaa	attaaaaatc	ttagagacgg	ttccgttttg	atttgttcac	aaactactct	5640
taacaccagc	cgtgaaaaat	ggcatgatca	aaatgtcata	ccttaagcat	ttttttgggc	5700
ttaacaatgt	aaagttgaaa	tttccttctt	tttacaatat	ttgcttggtta	attactaagg	5760
atccctacag	actgttttaa	attttttttc	catcattcac	acagatacta	acaaaaccag	5820
agtaatcaag	acaattattg	aagaggtggc	gcccgcaggt	agagttcttt	catctattgt	5880
tgaatcagaa	accaagaac	actactatta	acctgcacaa	agaggaaaga	gtctcccttc	5940
acacagacca	ttattttacag	atgcatggaa	aacaaagtct	ccaagaaaac	acttctgtct	6000
tgatggctta	tggaaataga	ccttgaaaat	aaggtgtcta	caaggtgttt	tgtgggtttct	6060
gtatttcttc	ttttcacttt	accacaaaat	gttctttaat	ggaaagaaaa	acaactttgt	6120
gttctcat	actaatgaat	ttcaataaac	tttcttactg	atgcaaaacta	tcccaatttg	6180
tcagaattta	tctttactta	agtacataat	actctttaa	attaaagatt	agtaacccat	6240

agcagttgaa	ggttgatgta	tccagaaatt	cggaagacag	aactattgtc	atgccttttc	6300
taagtttttt	aatcatgtat	gttcagacca	ccgtcagtaa	attcactgag	taaagtctgt	6360
aaatcccca	tattactctt	taagatacac	aatattgtga	aggctcccag	ctctctggct	6420
ttaaattatt	tcaatcctgg	aaattctgga	atatctcaaa	tataaccccc	aaaataataa	6480
taa						6483

<210> 25

<211> 1871

<212> DNA

<213> Homo sapiens

<400> 25

agttgtggcc	accttcccca	ggccatggat	ctctccaaca	acaccatgtc	actctcagtg	60
cgcaaccccc	gactgtcccc	gcggctctcc	tcgcagagtg	tgataggcag	accagggggc	120
atgtctgctt	ccagtgttgg	aagtggttat	gggggaagtg	cctttggctt	tggagccagc	180
tgtgggggag	gcttttctgc	tgcttccatg	tttggttcta	gttccggctt	tgggggtggc	240
tccggaagtt	ccatggcagg	aggactgggt	gctggttatg	ggagagccct	gggtggaggt	300
agctttggag	ggctggggat	gggatttggg	ggcagcccag	gaggtggctc	tctagggtatt	360
ctctcgggca	atgatggagg	ccttctttct	ggatcagaaa	aagaaactat	gcaaaatcct	420
aatgatagat	tagcttccta	cctggataag	gtgcgagctc	tagaagaggc	taatactgag	480
ctagaaaata	aaattcgaga	atggtatgaa	acacgaggaa	ctgggactgc	agatgcttca	540
cagagcgatt	acagcaaata	ttatccactg	attgaagacc	tcaggaataa	gatcatttca	600
gccagcattg	gaaatgccca	gctcctcttg	cagattgaca	atgcgagact	agctgctgag	660
gacttcagga	tgaagtatga	gaatgaactg	gccttgccgc	agggcgtaga	ggccgacatc	720
aatggcctgc	gccgggtgct	ggacgagctg	accctgacca	ggaccgacct	ggagatgcag	780
atcgagagcc	tgaacgagga	gctggcctac	atgaagaaga	accacgagga	tgagctccaa	840
agcttccggg	tgggcccggc	aggcgaggtc	agcgtagaaa	tggacgctgc	ccccggagtg	900
gacctcacca	ggctcctcaa	tgatatgcgg	gcgcagtatg	aaaccatcgc	tgagcagaat	960
cggaaggacg	ctgaagcctg	gttcattgaa	aagagcgggg	agctccgtaa	ggagattagc	1020
accaacaccg	agcagcttca	gtccagcaag	agcgaggtca	ccgacctgcg	tcgcgccttt	1080
cagaacctgg	agatcgagct	acagtcccag	ctcgccatga	agaaatccct	ggaggactcc	1140
ttggccgaag	ccgagggcga	ttactgcgcg	cagctgtccc	aggtgcagca	gctcatcagc	1200
aacctggagg	cacagctgct	ccaggtgcgc	gcggacgcag	agcgccagaa	cgtggaccac	1260
cagcggctgc	tgaatgtcaa	ggccccgcctg	gagctggaga	ttgagacctc	ccgccgcctg	1320
ctggacgggg	aggcccaagg	tgatggtttg	gaggaaagtt	tatttgtgac	agactccaaa	1380
tcacaagcac	agtcaactga	ttcctctaaa	gacccaacca	aaacccgaaa	aatcaagaca	1440
gttgtgcagg	agatggtgaa	tggtgaggtg	gtctcatctc	aagttcagga	aattgaagaa	1500
ctaattgtaa	atttcacaag	atctgcccc	tgattggttc	cttaggaaca	agaaatttac	1560
aagtagaaat	tattcctttc	agagtaacat	gctgtattac	ttcaatccct	atttttgtct	1620
gttccatttt	ctttggattc	cctattcaca	ttgaatcctt	tttgcccttc	tgaacaata	1680
gttcacaca	agtcattttg	gtcatgttgg	tctttgtaac	aaatcaaaat	tccttatat	1740
ccttctggac	aactggagta	gtcttttaac	gaactttctt	ctggtaaccc	ggaatatttt	1800
cttaatcata	gagctttact	caagtagtat	tgttttaata	gagttaattg	taataaaaaga	1860
tgaatggtaa	a					1871

<210> 26

<211> 1447

<212> DNA

<213> Homo sapiens

<400> 26

ctgcaactgg	ttctgagagg	gctccttcaa	tggcagcgag	aaggagacta	tgagttcctt	60
gaacgaccgc	ctggccagct	acctggagaa	ggtgcgtcac	gtggagcggg	acaacgcggg	120
gctggagaa	ctcatccggg	agcggctcca	gcagcaggag	cccttgctgt	gccccagcta	180
ccagtccctac	ttcaagacca	ttgaggagct	ccagcagaag	atcctgtgca	gcaagtctga	240
gaatgccagg	ctgggtggtg	agatcgacaa	tgccaagctg	gctgcagatg	acttcagaac	300
caagtaccag	acggagcagt	ccctgcggca	gctgggtggg	tccgacatca	acagcctgcg	360
caggattctg	gatgagctga	ccctgtgcag	gtctgacctg	gaggcccaga	tggagtccct	420

```

gaaggaggag ctgctgtccc tcaagcagaa ccatgagcag gaagtcaaca ccttgcgctg 480
ccagcttgga gaccgcctca acgtggaggt ggacgctgct cccgctgtgg acctgaacca 540
ggctcctgaac gagaccagga atcagtatga ggccctgggt gaaaccaacc gcagggaagt 600
ggagcaatgg ttgcgccagc agaccgagga gctgaacaag cagggtggtat ccagctcgga 660
gcagctgcag tcctaccagg cggagatcat cgagctgaga cgcacagtca atgccctgga 720
gatcgagctg caggcccagc acaacctgcg atactctctg gaaaacacgc tgacagagag 780
cgaggcccg ctagctccc agctgtccca ggtgcagagc ctgatcacca acgtggagtc 840
ccagctggcg gagatccgca gtgacctgga gcggcagaac caggagtatc aggtgctgct 900
ggacgtgcgg gcgcggtggt agtggtgagat caacacatac cggagcctgc tggagagcga 960
ggactgcaag ctgccctcca acccctgcgc caccaccaat gcatgtgaaa agcccattgg 1020
atcctgtgtc accaatcctt gtggtcctcg ttcccgtgt gggccttgca acacctttgg 1080
gtactagata ccctggggcc agcagaagta tagcatgaag acagaactac catcggtggg 1140
ccagttctgc ctctctgaca accatcagcc accggacccc accccgaggc atcaccacaa 1200
atcatggtct ggaaggagaa caaatgccca gcgtttgggt ctgactctga gcctagggct 1260
actgacctc ctcaccccag gtccctctcc tgtagtcagt ctgagttctg atggctcagag 1320
gttggagctg tgacagtggc atacgaggtg ttttgttctc tctgctgctt ctacctttat 1380
tgcagttccc caaatcgctt aataaacttt cctcttgcaa agcagacaaa aaaaaaaaaa 1440
aaaaaaaa

```

<210> 27

<211> 261

<212> PRT

<213> Homo sapiens

<400> 27

```

Met Asn Pro Asn Cys Ala Arg Cys Gly Lys Ile Val Tyr Pro Thr Glu
1          5          10          15
Lys Val Asn Cys Leu Asp Lys Phe Trp His Lys Ala Cys Phe His Cys
          20          25          30
Glu Thr Cys Lys Met Thr Leu Asn Met Lys Asn Tyr Lys Gly Tyr Glu
          35          40          45
Lys Lys Pro Tyr Cys Asn Ala His Tyr Pro Lys Gln Ser Phe Thr Met
          50          55          60
Val Ala Asp Thr Pro Glu Asn Leu Arg Leu Lys Gln Gln Ser Glu Leu
          65          70          75          80
Gln Ser Gln Val Arg Tyr Lys Glu Glu Phe Glu Lys Asn Lys Gly Lys
          85          90          95
Gly Phe Ser Val Val Ala Asp Thr Pro Glu Leu Gln Arg Ile Lys Lys
          100          105          110
Thr Gln Asp Gln Ile Ser Asn Ile Lys Tyr His Glu Glu Phe Glu Lys
          115          120          125
Ser Arg Met Gly Pro Ser Gly Gly Glu Gly Met Glu Pro Glu Arg Arg
          130          135          140
Asp Ser Gln Asp Gly Ser Ser Tyr Arg Arg Pro Leu Glu Gln Gln Gln
          145          150          155          160
Pro His His Ile Pro Thr Ser Ala Pro Val Tyr Gln Gln Pro Gln Gln
          165          170          175
Gln Pro Val Ala Gln Ser Tyr Gly Gly Tyr Lys Glu Pro Ala Ala Pro
          180          185          190
Val Ser Ile Gln Arg Ser Ala Pro Gly Gly Gly Lys Arg Tyr Arg
          195          200          205
Ala Val Tyr Asp Tyr Ser Ala Ala Asp Glu Asp Glu Val Ser Phe Gln
          210          215          220
Asp Gly Asp Thr Ile Val Asn Val Gln Gln Ile Asp Asp Gly Trp Met
          225          230          235          240
Tyr Gly Thr Val Glu Arg Thr Gly Asp Thr Gly Met Leu Pro Ala Asn
          245          250          255
Tyr Val Glu Ala Ile
          260

```

<210> 28

<211> 478

<212> PRT

<213> Homo sapiens

<400> 28

```

Met Val Gln Lys Thr Ser Met Ser Arg Gly Pro Tyr Pro Pro Ser Gln
1      5      10      15
Glu Ile Pro Met Glu Val Phe Asp Pro Ser Pro Gln Gly Lys Tyr Ser
      20      25      30
Lys Arg Lys Gly Arg Phe Lys Arg Ser Asp Gly Ser Thr Ser Ser Asp
      35      40      45
Thr Thr Ser Asn Ser Phe Val Arg Gln Gly Ser Ala Glu Ser Tyr Thr
      50      55      60
Ser Arg Pro Ser Asp Ser Asp Val Ser Leu Glu Glu Asp Arg Glu Ala
65      70      75      80
Leu Arg Lys Glu Ala Glu Arg Gln Ala Leu Ala Gln Leu Glu Lys Ala
      85      90      95
Lys Thr Lys Pro Val Ala Phe Ala Val Arg Thr Asn Val Gly Tyr Asn
      100      105      110
Pro Ser Pro Gly Asp Glu Val Pro Val Gln Gly Val Ala Ile Thr Phe
      115      120      125
Glu Pro Lys Asp Phe Leu His Ile Lys Glu Lys Tyr Asn Asn Asp Trp
130      135      140
Trp Ile Gly Arg Leu Val Lys Glu Gly Cys Glu Val Gly Phe Ile Pro
145      150      155      160
Ser Pro Val Lys Leu Asp Ser Leu Arg Leu Leu Gln Glu Gln Lys Leu
      165      170      175
Arg Gln Asn Arg Leu Gly Ser Ser Lys Ser Gly Asp Asn Ser Ser Ser
      180      185      190
Ser Leu Gly Asp Val Val Thr Gly Thr Arg Arg Pro Thr Pro Pro Ala
195      200      205
Ser Ala Lys Gln Lys Gln Lys Ser Thr Glu His Val Pro Pro Tyr Asp
210      215      220
Val Val Pro Ser Met Arg Pro Ile Ile Leu Val Gly Pro Ser Leu Lys
225      230      235      240
Gly Tyr Glu Val Thr Asp Met Met Gln Lys Ala Leu Phe Asp Phe Leu
      245      250      255
Lys His Arg Phe Asp Gly Arg Ile Ser Ile Thr Arg Val Thr Ala Asp
260      265      270
Ile Ser Leu Ala Lys Arg Ser Val Leu Asn Asn Pro Ser Lys His Ile
275      280      285
Ile Ile Glu Arg Ser Asn Thr Arg Ser Ser Leu Ala Glu Val Gln Ser
290      295      300
Glu Ile Glu Arg Ile Phe Glu Leu Ala Arg Thr Leu Gln Leu Val Ala
305      310      315      320
Leu Asp Ala Asp Thr Ile Asn His Pro Ala Gln Leu Ser Lys Thr Ser
      325      330      335
Leu Ala Pro Ile Ile Val Tyr Ile Lys Ile Thr Ser Pro Lys Val Leu
      340      345      350
Gln Arg Leu Ile Lys Ser Arg Gly Lys Ser Gln Ser Lys His Leu Asn
355      360      365
Val Gln Ile Ala Ala Ser Glu Lys Leu Ala Gln Cys Pro Pro Glu Met
370      375      380
Phe Asp Ile Ile Leu Asp Glu Asn Gln Leu Glu Asp Ala Cys Glu His
385      390      395      400
Leu Ala Glu Tyr Leu Glu Ala Tyr Trp Lys Ala Thr His Pro Pro Ser
      405      410      415
Ser Thr Pro Pro Asn Pro Leu Leu Asn Arg Thr Met Ala Thr Ala Ala
420      425      430
Leu Arg Arg Ser Pro Ala Pro Val Ser Asn Leu Gln Val Gln Val Leu
435      440      445
Thr Ser Leu Arg Arg Asn Leu Gly Phe Trp Gly Gly Leu Glu Ser Ser
450      455      460

```

Gln Arg Gly Ser Val Val Pro Gln Glu Gln Glu His Ala Met
 465 470 475

<210> 29

<211> 196

<212> PRT

<213> Homo sapiens

<400> 29

Met Ser Met Leu Arg Leu Gln Lys Arg Leu Ala Ser Ser Val Leu Arg
 1 5 10 15
 Cys Gly Lys Lys Lys Val Trp Leu Asp Pro Asn Glu Thr Asn Glu Ile
 20 25 30
 Ala Asn Ala Asn Ser Arg Gln Gln Ile Arg Lys Leu Ile Lys Asp Gly
 35 40 45
 Leu Ile Ile Arg Lys Pro Val Thr Val His Ser Arg Ala Arg Cys Arg
 50 55 60
 Lys Asn Thr Leu Ala Arg Arg Lys Gly Arg His Met Gly Ile Gly Lys
 65 70 75 80
 Arg Lys Gly Thr Ala Asn Ala Arg Met Pro Glu Lys Val Thr Trp Met
 85 90 95
 Arg Arg Met Arg Ile Leu Arg Arg Leu Leu Arg Arg Tyr Arg Glu Ser
 100 105 110
 Lys Lys Ile Asp Arg His Met Tyr His Ser Leu Tyr Leu Lys Val Lys
 115 120 125
 Gly Asn Val Phe Lys Asn Lys Arg Ile Leu Met Glu His Ile His Lys
 130 135 140
 Leu Lys Ala Asp Lys Ala Arg Lys Lys Leu Leu Ala Asp Gln Ala Glu
 145 150 155 160
 Ala Arg Arg Ser Lys Thr Lys Glu Ala Arg Lys Arg Arg Glu Glu Arg
 165 170 175
 Leu Gln Ala Lys Lys Glu Glu Ile Ile Lys Thr Leu Ser Lys Glu Glu
 180 185 190
 Glu Thr Lys Lys
 195

<210> 30

<211> 1566

<212> PRT

<213> Homo sapiens

<400> 30

Met Ser Ser Leu Leu Glu Arg Leu His Ala Lys Phe Asn Gln Asn Arg
 1 5 10 15
 Pro Trp Ser Glu Thr Ile Lys Leu Val Arg Gln Val Met Glu Lys Arg
 20 25 30
 Val Val Met Ser Ser Gly Gly His Gln His Leu Val Ser Cys Leu Glu
 35 40 45
 Thr Leu Gln Lys Ala Leu Lys Val Thr Ser Leu Pro Ala Met Thr Asp
 50 55 60
 Arg Leu Glu Ser Ile Ala Gly Gln Asn Gly Leu Gly Ser His Leu Ser
 65 70 75 80
 Ala Ser Gly Thr Glu Cys Tyr Ile Thr Ser Asp Met Phe Tyr Val Glu
 85 90 95
 Val Gln Leu Asp Pro Ala Gly Gln Leu Cys Asp Val Lys Val Ala His
 100 105 110
 His Gly Glu Asn Pro Val Ser Cys Pro Glu Leu Val Gln Gln Leu Arg
 115 120 125

Glu Lys Asn Ser Asp Glu Phe Ser Lys His Leu Lys Gly Leu Val Asn
 130 135 140
 Leu Tyr Asn Leu Pro Gly Asp Asn Lys Leu Lys Thr Lys Met Tyr Leu
 145 150 155 160
 Ala Leu Gln Ser Leu Glu Gln Asp Leu Ser Lys Met Ala Ile Met Tyr
 165 170 175
 Trp Lys Ala Thr Asn Ala Gly Pro Leu Asp Lys Ile Leu His Gly Ser
 180 185 190
 Val Gly Tyr Leu Thr Pro Arg Ser Gly Gly His Leu Met Asn Leu Lys
 195 200 205
 Tyr Tyr Val Ser Pro Ser Asp Leu Leu Asp Asp Lys Thr Ala Ser Pro
 210 215 220
 Ile Ile Leu His Glu Asn Asn Val Ser Arg Ser Leu Gly Met Asn Ala
 225 230 235 240
 Ser Val Thr Ile Glu Gly Thr Ser Ala Val Tyr Lys Leu Pro Ile Ala
 245 250 255
 Pro Leu Ile Met Gly Ser His Pro Val Asp Asn Lys Trp Thr Pro Ser
 260 265 270
 Phe Ser Ser Ile Thr Ser Ala Asn Ser Val Asp Leu Pro Ala Cys Phe
 275 280 285
 Phe Leu Lys Phe Pro Gln Pro Ile Pro Val Ser Arg Ala Phe Val Gln
 290 295 300
 Lys Leu Gln Asn Cys Thr Gly Ile Pro Leu Phe Glu Thr Gln Pro Thr
 305 310 315 320
 Tyr Ala Pro Leu Tyr Glu Leu Ile Thr Gln Phe Glu Leu Ser Lys Asp
 325 330 335
 Pro Asp Pro Ile Pro Leu Asn His Asn Met Arg Phe Tyr Ala Ala Leu
 340 345 350
 Pro Gly Gln Gln His Cys Tyr Phe Leu Asn Lys Asp Ala Pro Leu Pro
 355 360 365
 Asp Gly Arg Ser Leu Gln Gly Thr Leu Val Ser Lys Ile Thr Phe Gln
 370 375 380
 His Pro Gly Arg Val Pro Leu Ile Leu Asn Leu Ile Arg His Gln Val
 385 390 395 400
 Ala Tyr Asn Thr Leu Ile Gly Ser Cys Val Lys Arg Thr Ile Leu Lys
 405 410 415
 Glu Asp Ser Pro Gly Leu Leu Gln Phe Glu Val Cys Pro Leu Ser Glu
 420 425 430
 Ser Arg Phe Ser Val Ser Phe Gln His Pro Val Asn Asp Ser Leu Val
 435 440 445
 Cys Val Val Met Asp Val Gln Gly Leu Thr His Val Ser Cys Lys Leu
 450 455 460
 Tyr Lys Gly Leu Ser Asp Ala Leu Ile Cys Thr Asp Asp Phe Ile Ala
 465 470 475 480
 Lys Val Val Gln Arg Cys Met Ser Ile Pro Val Thr Met Arg Ala Ile
 485 490 495
 Arg Arg Lys Ala Glu Thr Ile Gln Ala Asp Thr Pro Ala Leu Ser Leu
 500 505 510
 Ile Ala Glu Thr Val Glu Asp Met Val Lys Lys Asn Leu Pro Pro Ala
 515 520 525
 Ser Ser Pro Gly Tyr Gly Met Thr Thr Gly Asn Asn Pro Met Ser Gly
 530 535 540
 Thr Thr Thr Ser Thr Asn Thr Phe Pro Gly Gly Pro Ile Ala Thr Leu
 545 550 555 560
 Phe Asn Met Ser Met Ser Ile Lys Asp Arg His Glu Ser Val Gly His
 565 570 575
 Gly Glu Asp Phe Ser Lys Val Ser Gln Asn Pro Ile Leu Thr Ser Leu
 580 585 590
 Leu Gln Ile Thr Gly Asn Gly Gly Ser Thr Ile Gly Ser Ser Pro Thr
 595 600 605
 Pro Pro His His Thr Pro Pro Pro Val Ser Ser Met Ala Gly Asn Thr
 610 615 620
 Lys Asn His Pro Met Leu Met Asn Leu Leu Lys Asp Asn Pro Ala Gln
 625 630 635 640
 Asp Phe Ser Thr Leu Tyr Gly Ser Ser Pro Leu Glu Arg Gln Asn Ser
 645 650 655

Ser Ser Gly Ser Pro Arg Met Glu Ile Cys Ser Gly Ser Asn Lys Thr
 660 665 670
 Lys Lys Lys Lys Ser Ser Arg Leu Pro Pro Glu Lys Pro Lys His Gln
 675 680 685
 Thr Glu Asp Asp Phe Gln Arg Glu Leu Phe Ser Met Asp Val Asp Ser
 690 695 700
 Gln Asn Pro Ile Phe Asp Val Asn Met Thr Ala Asp Thr Leu Asp Thr
 705 710 715 720
 Pro His Ile Thr Pro Ala Pro Ser Gln Cys Ser Thr Pro Pro Thr Thr
 725 730 735
 Tyr Pro Gln Pro Val Pro His Pro Gln Pro Ser Ile Gln Arg Met Val
 740 745 750
 Arg Leu Ser Ser Ser Asp Ser Ile Gly Pro Asp Val Thr Asp Ile Leu
 755 760 765
 Ser Asp Ile Ala Glu Glu Ala Ser Lys Leu Pro Ser Thr Ser Asp Asp
 770 775 780
 Cys Pro Ala Ile Gly Thr Pro Leu Arg Asp Ser Ser Ser Ser Gly His
 785 790 795 800
 Ser Gln Ser Thr Leu Phe Asp Ser Asp Val Phe Gln Thr Asn Asn Asn
 805 810 815
 Glu Asn Pro Tyr Thr Asp Pro Ala Asp Leu Ile Ala Asp Ala Ala Gly
 820 825 830
 Ser Pro Ser Ser Asp Ser Pro Thr Asn His Phe Phe His Asp Gly Val
 835 840 845
 Asp Phe Asn Pro Asp Leu Leu Asn Ser Gln Ser Gln Ser Gly Phe Gly
 850 855 860
 Glu Glu Tyr Phe Asp Glu Ser Ser Gln Ser Gly Asp Asn Asp Asp Phe
 865 870 875 880
 Lys Gly Phe Ala Ser Gln Ala Leu Asn Thr Leu Gly Val Pro Met Leu
 885 890 895
 Gly Gly Asp Asn Gly Glu Thr Lys Phe Lys Gly Asn Asn Gln Ala Asp
 900 905 910
 Thr Val Asp Phe Ser Ile Ile Ser Val Ala Gly Lys Ala Leu Ala Pro
 915 920 925
 Ala Asp Leu Met Glu His His Ser Gly Ser Gln Gly Pro Leu Leu Thr
 930 935 940
 Thr Gly Asp Leu Gly Lys Glu Lys Thr Gln Lys Arg Val Lys Glu Gly
 945 950 955 960
 Asn Gly Thr Ser Asn Ser Thr Leu Ser Gly Pro Gly Leu Asp Ser Lys
 965 970 975
 Pro Gly Lys Arg Ser Arg Thr Pro Ser Asn Asp Gly Lys Ser Lys Asp
 980 985 990
 Lys Pro Pro Lys Arg Lys Lys Ala Asp Thr Glu Gly Lys Ser Pro Ser
 995 1000 1005
 His Ser Ser Ser Asn Arg Pro Phe Thr Pro Pro Thr Ser Thr Gly
 1010 1015 1020
 Gly Ser Lys Ser Pro Gly Ser Ala Gly Arg Ser Gln Thr Pro Pro
 1025 1030 1035
 Gly Val Ala Thr Pro Pro Ile Pro Lys Ile Thr Ile Gln Ile Pro
 1040 1045 1050
 Lys Gly Thr Val Met Val Gly Lys Pro Ser Ser His Ser Gln Tyr
 1055 1060 1065
 Thr Ser Ser Gly Ser Val Ser Ser Ser Gly Ser Lys Ser His His
 1070 1075 1080
 Ser His Ser Ser Ser Ser Ser Ser Ser Ala Ser Thr Ser Gly Lys
 1085 1090 1095
 Met Lys Ser Ser Lys Ser Glu Gly Ser Ser Ser Ser Lys Leu Ser
 1100 1105 1110
 Ser Ser Met Tyr Ser Ser Gln Gly Ser Ser Gly Ser Ser Gln Ser
 1115 1120 1125
 Lys Asn Ser Ser Gln Ser Gly Gly Lys Pro Gly Ser Ser Pro Ile
 1130 1135 1140
 Thr Lys His Gly Leu Ser Ser Gly Ser Ser Ser Thr Lys Met Lys
 1145 1150 1155
 Pro Gln Gly Lys Pro Ser Ser Leu Met Asn Pro Ser Leu Ser Lys
 1160 1165 1170

Pro	Asn	Ile	Ser	Pro	Ser	His	Ser	Arg	Pro	Pro	Gly	Gly	Ser	Asp
	1175					1180					1185			
Lys	Leu	Ala	Ser	Pro	Met	Lys	Pro	Val	Pro	Gly	Thr	Pro	Pro	Ser
	1190					1195					1200			
Ser	Lys	Ala	Lys	Ser	Pro	Ile	Ser	Ser	Gly	Ser	Gly	Gly	Ser	His
	1205					1210					1215			
Met	Ser	Gly	Thr	Ser	Ser	Ser	Ser	Gly	Met	Lys	Ser	Ser	Ser	Gly
	1220					1225					1230			
Leu	Gly	Ser	Ser	Gly	Ser	Leu	Ser	Gln	Lys	Thr	Pro	Pro	Ser	Ser
	1235					1240					1245			
Asn	Ser	Cys	Thr	Ala	Ser	Ser	Ser	Ser	Phe	Ser	Ser	Ser	Gly	Ser
	1250					1255					1260			
Ser	Met	Ser	Ser	Ser	Gln	Asn	Gln	His	Gly	Ser	Ser	Lys	Gly	Lys
	1265					1270					1275			
Ser	Pro	Ser	Arg	Asn	Lys	Lys	Pro	Ser	Leu	Thr	Ala	Val	Ile	Asp
	1280					1285					1290			
Lys	Leu	Lys	His	Gly	Val	Val	Thr	Ser	Gly	Pro	Gly	Gly	Glu	Asp
	1295					1300					1305			
Pro	Leu	Asp	Gly	Gln	Met	Gly	Val	Ser	Thr	Asn	Ser	Ser	Ser	His
	1310					1315					1320			
Pro	Met	Ser	Ser	Lys	His	Asn	Met	Ser	Gly	Gly	Glu	Phe	Gln	Gly
	1325					1330					1335			
Lys	Arg	Glu	Lys	Ser	Asp	Lys	Asp	Lys	Ser	Lys	Val	Ser	Thr	Ser
	1340					1345					1350			
Gly	Ser	Ser	Val	Asp	Ser	Ser	Lys	Lys	Thr	Ser	Glu	Ser	Lys	Asn
	1355					1360					1365			
Val	Gly	Ser	Thr	Gly	Val	Ala	Lys	Ile	Ile	Ile	Ser	Lys	His	Asp
	1370					1375					1380			
Gly	Gly	Ser	Pro	Ser	Ile	Lys	Ala	Lys	Val	Thr	Leu	Gln	Lys	Pro
	1385					1390					1395			
Gly	Glu	Ser	Ser	Gly	Glu	Gly	Leu	Arg	Pro	Gln	Met	Ala	Ser	Ser
	1400					1405					1410			
Lys	Asn	Tyr	Gly	Ser	Pro	Leu	Ile	Ser	Gly	Ser	Thr	Pro	Lys	His
	1415					1420					1425			
Glu	Arg	Gly	Ser	Pro	Ser	His	Ser	Lys	Ser	Pro	Ala	Tyr	Thr	Pro
	1430					1435					1440			
Gln	Asn	Leu	Asp	Ser	Glu	Ser	Glu	Ser	Gly	Ser	Ser	Ile	Ala	Glu
	1445					1450					1455			
Lys	Ser	Tyr	Gln	Asn	Ser	Pro	Ser	Ser	Asp	Asp	Gly	Ile	Arg	Pro
	1460					1465					1470			
Leu	Pro	Glu	Tyr	Ser	Thr	Glu	Lys	His	Lys	Lys	His	Lys	Lys	Glu
	1475					1480					1485			
Lys	Lys	Lys	Val	Lys	Asp	Lys	Asp	Arg	Asp	Arg	Asp	Arg	Asp	Lys
	1490					1495					1500			
Asp	Arg	Asp	Lys	Lys	Lys	Ser	His	Ser	Ile	Lys	Pro	Glu	Ser	Trp
	1505					1510					1515			
Ser	Lys	Ser	Pro	Ile	Ser	Ser	Asp	Gln	Ser	Leu	Ser	Met	Thr	Ser
	1520					1525					1530			
Asn	Thr	Ile	Leu	Ser	Ala	Asp	Arg	Pro	Ser	Arg	Leu	Ser	Pro	Asp
	1535					1540					1545			
Phe	Met	Ile	Gly	Glu	Glu	Asp	Asp	Asp	Leu	Met	Asp	Val	Ala	Leu
	1550					1555					1560			
Ile	Gly	Asn												
	1565													

<210> 31

<211> 1490

<212> PRT

<213> Homo sapiens


```

<400> 31
Met Pro Asn Ser Glu Arg His Gly Gly Lys Lys Asp Gly Ser Gly Gly
1      5      10      15
Ala Ser Gly Thr Leu Gln Pro Ser Ser Gly Gly Gly Ser Ser Asn Ser
20      25      30
Arg Glu Arg His Arg Leu Val Ser Lys His Lys Arg His Lys Ser Lys
35      40      45
His Ser Lys Asp Met Gly Leu Val Thr Pro Glu Ala Ala Ser Leu Gly
50      55      60
Thr Val Ile Lys Pro Leu Val Glu Tyr Asp Asp Ile Ser Ser Asp Ser
65      70      75      80
Asp Thr Phe Ser Asp Asp Met Ala Phe Lys Leu Asp Arg Arg Glu Asn
85      90      95
Asp Glu Arg Arg Gly Ser Asp Arg Ser Asp Arg Leu His Lys His Arg
100     105     110
His His Gln His Arg Arg Ser Arg Asp Leu Leu Lys Ala Lys Gln Thr
115     120     125
Glu Lys Glu Lys Ser Gln Glu Val Ser Ser Lys Ser Gly Ser Met Lys
130     135     140
Asp Arg Ile Ser Gly Ser Ser Lys Arg Ser Asn Glu Glu Thr Asp Asp
145     150     155     160
Tyr Gly Lys Ala Gln Val Ala Lys Ser Ser Ser Lys Glu Ser Arg Ser
165     170     175
Ser Lys Leu His Lys Glu Lys Thr Arg Lys Glu Arg Glu Leu Lys Ser
180     185     190
Gly His Lys Asp Arg Ser Lys Ser His Arg Lys Arg Glu Thr Pro Lys
195     200     205
Ser Tyr Lys Thr Val Asp Ser Pro Lys Arg Arg Ser Arg Ser Pro His
210     215     220
Arg Lys Trp Ser Asp Ser Ser Lys Gln Asp Asp Ser Pro Ser Gly Ala
225     230     235     240
Ser Tyr Gly Gln Asp Tyr Asp Leu Ser Pro Ser Arg Ser His Thr Ser
245     250     255
Ser Asn Tyr Asp Ser Tyr Lys Lys Ser Pro Gly Ser Thr Ser Arg Arg
260     265     270
Gln Ser Val Ser Pro Pro Tyr Lys Glu Pro Ser Ala Tyr Gln Ser Ser
275     280     285
Thr Arg Ser Pro Ser Pro Tyr Ser Arg Arg Gln Arg Ser Val Ser Pro
290     295     300
Tyr Ser Arg Arg Arg Ser Ser Ser Tyr Glu Arg Ser Gly Ser Tyr Ser
305     310     315     320
Gly Arg Ser Pro Ser Pro Tyr Gly Arg Arg Ser Ser Ser Pro Phe
325     330     335
Leu Ser Lys Arg Ser Leu Ser Arg Ser Pro Leu Pro Ser Arg Lys Ser
340     345     350
Met Lys Ser Arg Ser Arg Ser Pro Ala Tyr Ser Arg His Ser Ser Ser
355     360     365
His Ser Lys Lys Lys Arg Ser Ser Ser Arg Ser Arg His Ser Ser Ile
370     375     380
Ser Pro Val Arg Leu Pro Leu Asn Ser Ser Leu Gly Ala Glu Leu Ser
385     390     395     400
Arg Lys Lys Lys Glu Arg Ala Ala Ala Ala Ala Ala Lys Met Asp
405     410     415
Gly Lys Glu Ser Lys Gly Ser Pro Val Phe Leu Pro Arg Lys Glu Asn
420     425     430
Ser Ser Val Glu Ala Lys Asp Ser Gly Leu Glu Ser Lys Lys Leu Pro
435     440     445
Arg Ser Val Lys Leu Glu Lys Ser Ala Pro Asp Thr Glu Leu Val Asn
450     455     460
Val Thr His Leu Asn Thr Glu Val Lys Asn Ser Ser Asp Thr Gly Lys
465     470     475     480
Val Lys Leu Asp Glu Asn Ser Glu Lys His Leu Val Lys Asp Leu Lys
485     490     495
Ala Gln Gly Thr Arg Asp Ser Lys Pro Ile Ala Leu Lys Glu Glu Ile
500     505     510

```

Val Thr Pro Lys Glu Thr Glu Thr Ser Glu Lys Glu Thr Pro Pro Pro
 515 520 525
 Leu Pro Thr Ile Ala Ser Pro Pro Pro Leu Pro Thr Thr Thr Pro
 530 535 540
 Pro Pro Gln Thr Pro Pro Leu Pro Pro Leu Pro Ile Pro Ala Leu
 545 550 555 560
 Pro Gln Gln Pro Pro Leu Pro Pro Ser Gln Pro Ala Phe Ser Gln Val
 565 570 575
 Pro Ala Ser Ser Thr Ser Thr Leu Pro Ser Thr His Ser Lys Thr
 580 585 590
 Ser Ala Val Ser Ser Gln Ala Asn Ser Gln Pro Pro Val Gln Val Ser
 595 600 605
 Val Lys Thr Gln Val Ser Val Thr Ala Ala Ile Pro His Leu Lys Thr
 610 615 620
 Ser Thr Leu Pro Pro Leu Pro Leu Pro Pro Leu Pro Gly Gly Asp
 625 630 635 640
 Asp Met Asp Ser Pro Lys Glu Thr Leu Pro Ser Lys Pro Val Lys Lys
 645 650 655
 Glu Lys Glu Gln Arg Thr Arg His Leu Leu Thr Asp Leu Pro Leu Pro
 660 665 670
 Pro Glu Leu Pro Gly Gly Asp Leu Ser Pro Pro Asp Ser Pro Glu Pro
 675 680 685
 Lys Ala Ile Thr Pro Pro Gln Gln Pro Tyr Lys Lys Arg Pro Lys Ile
 690 695 700
 Cys Cys Pro Arg Tyr Gly Glu Arg Arg Gln Thr Glu Ser Asp Trp Gly
 705 710 715 720
 Lys Arg Cys Val Asp Lys Phe Asp Ile Ile Gly Ile Ile Gly Glu Gly
 725 730 735
 Thr Tyr Gly Gln Val Tyr Lys Ala Arg Asp Lys Asp Thr Gly Glu Leu
 740 745 750
 Val Ala Leu Lys Lys Val Arg Leu Asp Asn Glu Lys Glu Gly Phe Pro
 755 760 765
 Ile Thr Ala Ile Arg Glu Ile Lys Ile Leu Arg Gln Leu Ile His Arg
 770 775 780
 Ser Val Val Asn Met Lys Glu Ile Val Thr Asp Lys Gln Asp Ala Leu
 785 790 795 800
 Asp Phe Lys Lys Asp Lys Gly Ala Phe Tyr Leu Val Phe Glu Tyr Met
 805 810 815
 Asp His Asp Leu Met Gly Leu Leu Glu Ser Gly Leu Val His Phe Ser
 820 825 830
 Glu Asp His Ile Lys Ser Phe Met Lys Gln Leu Met Glu Gly Leu Glu
 835 840 845
 Tyr Cys His Lys Lys Asn Phe Leu His Arg Asp Ile Lys Cys Ser Asn
 850 855 860
 Ile Leu Leu Asn Asn Ser Gly Gln Ile Lys Leu Ala Asp Phe Gly Leu
 865 870 875 880
 Ala Arg Leu Tyr Asn Ser Glu Glu Ser Arg Pro Tyr Thr Asn Lys Val
 885 890 895
 Ile Thr Leu Trp Tyr Arg Pro Pro Glu Leu Leu Gly Glu Glu Arg
 900 905 910
 Tyr Thr Pro Ala Ile Asp Val Trp Ser Cys Gly Cys Ile Leu Gly Glu
 915 920 925
 Leu Phe Thr Lys Lys Pro Ile Phe Gln Ala Asn Leu Glu Leu Ala Gln
 930 935 940
 Leu Glu Leu Ile Ser Arg Leu Cys Gly Ser Pro Cys Pro Ala Val Trp
 945 950 955 960
 Pro Asp Val Ile Lys Leu Pro Tyr Phe Asn Thr Met Lys Pro Lys Lys
 965 970 975
 Gln Tyr Arg Arg Arg Leu Arg Glu Glu Phe Ser Phe Ile Pro Ser Ala
 980 985 990
 Ala Leu Asp Leu Leu Asp His Met Leu Thr Leu Asp Pro Ser Lys Arg
 995 1000 1005
 Cys Thr Ala Glu Gln Thr Leu Gln Ser Asp Phe Leu Lys Asp Val
 1010 1015 1020
 Glu Leu Ser Lys Met Ala Pro Pro Asp Leu Pro His Trp Gln Asp
 1025 1030 1035

<212> PRT

<213> Homo sapiens

<400> 32

```

Met Leu Thr Arg Leu Phe Ser Glu Pro Gly Leu Leu Ser Asp Val Pro
1      5      10      15
Lys Phe Ala Ser Trp Gly Asp Gly Glu Asp Asp Glu Pro Arg Ser Asp
20      25      30
Lys Gly Asp Ala Pro Pro Pro Pro Pro Ala Pro Gly Pro Gly Ala
35      40      45
Pro Gly Pro Ala Arg Ala Ala Lys Pro Val Pro Leu Arg Gly Glu Glu
50      55      60
Gly Thr Glu Ala Thr Leu Ala Glu Val Lys Glu Glu Gly Glu Leu Gly
65      70      75      80
Gly Glu Glu Glu Glu Glu Glu Glu Glu Glu Gly Leu Asp Glu Ala
85      90      95
Glu Gly Glu Arg Pro Lys Lys Arg Gly Pro Lys Lys Arg Lys Met Thr
100     105     110
Lys Ala Arg Leu Glu Arg Ser Lys Leu Arg Arg Gln Lys Ala Asn Ala
115     120     125
Arg Glu Arg Asn Arg Met His Asp Leu Asn Ala Ala Leu Asp Asn Leu
130     135     140
Arg Lys Val Val Pro Cys Tyr Ser Lys Thr Gln Lys Leu Ser Lys Ile
145     150     155     160
Glu Thr Leu Arg Leu Ala Lys Asn Tyr Ile Trp Ala Leu Ser Glu Ile
165     170     175
Leu Arg Ser Gly Lys Arg Pro Asp Leu Val Ser Tyr Val Gln Thr Leu
180     185     190
Cys Lys Gly Leu Ser Gln Pro Thr Thr Asn Leu Val Ala Gly Cys Leu
195     200     205
Gln Leu Asn Ser Arg Asn Phe Leu Thr Glu Gln Gly Ala Asp Gly Ala
210     215     220
Gly Arg Phe His Gly Ser Gly Gly Pro Phe Ala Met His Pro Tyr Pro
225     230     235     240
Tyr Pro Cys Ser Arg Leu Ala Gly Ala Gln Cys Gln Ala Ala Gly Gly
245     250     255
Leu Gly Gly Gly Ala Ala His Ala Leu Arg Thr His Gly Tyr Cys Ala
260     265     270
Ala Tyr Glu Thr Leu Tyr Ala Ala Ala Gly Gly Gly Gly Ala Ser Pro
275     280     285
Asp Tyr Asn Ser Ser Glu Tyr Glu Gly Pro Leu Ser Pro Pro Leu Cys
290     295     300
Leu Asn Gly Asn Phe Ser Leu Lys Gln Asp Ser Ser Pro Asp His Glu
305     310     315     320
Lys Ser Tyr His Tyr Ser Met His Tyr Ser Ala Leu Pro Gly Ser Arg
325     330     335
His Gly His Gly Leu Val Phe Gly Ser Ser Ala Val Arg Gly Gly Val
340     345     350
His Ser Glu Asn Leu Leu Ser Tyr Asp Met His Leu His His Asp Arg
355     360     365
Gly Pro Met Tyr Glu Glu Leu Asn Ala Phe Phe His Asn
370     375     380

```

<210> 33

<211> 445

<212> PRT

<213> Homo sapiens

<400> 33
 Met Ser Lys Leu Pro Arg Glu Leu Thr Arg Asp Leu Glu Arg Ser Leu
 1 5 10 15
 Pro Ala Val Ala Ser Leu Gly Ser Ser Leu Ser His Ser Gln Ser Leu
 20 25 30
 Ser Ser His Leu Leu Pro Pro Pro Glu Lys Arg Arg Ala Ile Ser Asp
 35 40 45
 Val Arg Arg Thr Phe Cys Leu Phe Val Thr Phe Asp Leu Leu Phe Ile
 50 55 60
 Ser Leu Leu Trp Ile Ile Glu Leu Asn Thr Asn Thr Gly Ile Arg Lys
 65 70 75 80
 Asn Leu Glu Gln Glu Ile Ile Gln Tyr Asn Phe Lys Thr Ser Phe Phe
 85 90 95
 Asp Ile Phe Val Leu Ala Phe Phe Arg Phe Ser Gly Leu Leu Gly
 100 105 110
 Tyr Ala Val Leu Gln Leu Arg His Trp Trp Val Ile Ala Val Thr Thr
 115 120 125
 Leu Val Ser Ser Ala Phe Leu Ile Val Lys Val Ile Leu Ser Glu Leu
 130 135 140
 Leu Ser Lys Gly Ala Phe Gly Tyr Leu Leu Pro Ile Val Ser Phe Val
 145 150 155 160
 Leu Ala Trp Leu Glu Thr Trp Phe Leu Asp Phe Lys Val Leu Pro Gln
 165 170 175
 Glu Ala Glu Glu Glu Arg Trp Tyr Leu Ala Ala Gln Val Ala Val Ala
 180 185 190
 Arg Gly Pro Leu Leu Phe Ser Gly Ala Leu Ser Glu Gly Gln Phe Tyr
 195 200 205
 Ser Pro Pro Glu Ser Phe Ala Gly Ser Asp Asn Glu Ser Asp Glu Glu
 210 215 220
 Val Ala Gly Lys Lys Ser Phe Ser Ala Gln Glu Arg Glu Tyr Ile Arg
 225 230 235 240
 Gln Gly Lys Glu Ala Thr Ala Val Val Asp Gln Ile Leu Ala Gln Glu
 245 250 255
 Glu Asn Trp Lys Phe Glu Lys Asn Asn Glu Tyr Gly Asp Thr Val Tyr
 260 265 270
 Thr Ile Glu Val Pro Phe His Gly Lys Thr Phe Ile Leu Lys Thr Phe
 275 280 285
 Leu Pro Cys Pro Ala Glu Leu Val Tyr Gln Glu Val Ile Leu Gln Pro
 290 295 300
 Glu Arg Met Val Leu Trp Asn Lys Thr Val Thr Ala Cys Gln Ile Leu
 305 310 315 320
 Gln Arg Val Glu Asp Asn Thr Leu Ile Ser Tyr Asp Val Ser Ala Gly
 325 330 335
 Ala Ala Gly Gly Val Val Ser Pro Arg Asp Phe Val Asn Val Arg Arg
 340 345 350
 Ile Glu Arg Arg Arg Asp Arg Tyr Leu Ser Ser Gly Ile Ala Thr Ser
 355 360 365
 His Ser Ala Lys Pro Pro Thr His Lys Tyr Val Arg Gly Glu Asn Gly
 370 375 380
 Pro Gly Gly Phe Ile Val Leu Lys Ser Ala Ser Asn Pro Arg Val Cys
 385 390 395 400
 Thr Phe Val Trp Ile Leu Asn Thr Asp Leu Lys Gly Arg Leu Pro Arg
 405 410 415
 Tyr Leu Ile His Gln Ser Leu Ala Ala Thr Met Phe Glu Phe Ala Phe
 420 425 430
 His Leu Arg Gln Arg Ile Ser Glu Leu Gly Ala Arg Ala
 435 440 445
 <210> 34
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 34
 Met Ala Thr Ser Glu Leu Ser Cys Glu Val Ser Glu Glu Asn Cys Glu
 1 5 10 15
 Arg Arg Glu Ala Phe Trp Ala Glu Trp Lys Asp Leu Thr Leu Ser Thr
 20 25 30
 Arg Pro Glu Glu Gly Cys Ser Leu His Glu Glu Asp Thr Gln Arg His
 35 40 45
 Glu Thr Tyr His Gln Gln Gly Gln Cys Gln Val Leu Val Gln Arg Ser
 50 55 60
 Pro Trp Leu Met Met Arg Met Gly Ile Leu Gly Arg Gly Leu Gln Glu
 65 70 75 80
 Tyr Gln Leu Pro Tyr Gln Arg Val Leu Pro Leu Pro Ile Phe Thr Pro
 85 90 95
 Ala Lys Met Gly Ala Thr Lys Glu Glu Arg Glu Asp Thr Pro Ile Gln
 100 105 110
 Leu Gln Glu Leu Leu Ala Leu Glu Thr Ala Leu Gly Gly Gln Cys Val
 115 120 125
 Asp Arg Gln Glu Val Ala Glu Ile Thr Lys Gln Leu Pro Pro Val Val
 130 135 140
 Pro Val Ser Lys Pro Gly Ala Leu Arg Arg Ser Leu Ser Arg Ser Met
 145 150 155 160
 Ser Gln Glu Ala Gln Arg Gly
 165

<210> 35

<211> 282

<212> PRT

<213> Homo sapiens

<400> 35
 Met Ser Gly Ala Asp Arg Ser Pro Asn Ala Gly Ala Ala Pro Asp Ser
 1 5 10 15
 Ala Pro Gly Gln Ala Ala Val Ala Ser Ala Tyr Gln Arg Phe Glu Pro
 20 25 30
 Arg Ala Tyr Leu Arg Asn Asn Tyr Ala Pro Pro Arg Gly Asp Leu Cys
 35 40 45
 Asn Pro Asn Gly Val Gly Pro Trp Lys Leu Arg Cys Leu Ala Gln Thr
 50 55 60
 Phe Ala Thr Gly Glu Val Ser Gly Arg Thr Leu Ile Asp Ile Gly Ser
 65 70 75 80
 Gly Pro Thr Val Tyr Gln Leu Leu Ser Ala Cys Ser His Phe Glu Asp
 85 90 95
 Ile Thr Met Thr Asp Phe Leu Glu Val Asn Arg Gln Glu Leu Gly Arg
 100 105 110
 Trp Leu Gln Glu Glu Pro Gly Ala Phe Asn Trp Ser Met Tyr Ser Gln
 115 120 125
 His Ala Cys Leu Ile Glu Gly Lys Gly Glu Cys Trp Gln Asp Lys Glu
 130 135 140
 Arg Gln Leu Arg Ala Arg Val Lys Arg Val Leu Pro Ile Asp Val His
 145 150 155 160
 Gln Pro Gln Pro Leu Gly Ala Gly Ser Pro Ala Pro Leu Pro Ala Asp
 165 170 175
 Ala Leu Val Ser Ala Phe Cys Leu Glu Ala Val Ser Pro Asp Leu Ala
 180 185 190
 Ser Phe Gln Arg Ala Leu Asp His Ile Thr Thr Leu Leu Arg Pro Gly
 195 200 205
 Gly His Leu Leu Leu Ile Gly Ala Leu Glu Glu Ser Trp Tyr Leu Ala
 210 215 220
 Gly Glu Ala Arg Leu Thr Val Val Pro Val Ser Glu Glu Glu Val Arg
 225 230 235 240

Glu Ala Leu Val Arg Ser Gly Tyr Lys Val Arg Asp Leu Arg Thr Tyr
 245 250 255
 Ile Met Pro Ala His Leu Gln Thr Gly Val Asp Asp Val Lys Gly Val
 260 265 270
 Phe Phe Ala Trp Ala Gln Lys Val Gly Leu
 275 280
 <210> 36

<211> 1255

<212> PRT

<213> Homo sapiens

<400> 36

Met Glu Leu Ala Ala Leu Cys Arg Trp Gly Leu Leu Leu Ala Leu Leu
 1 5 10 15
 Pro Pro Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr Asp Met Lys
 20 25 30
 Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met Leu Arg His
 35 40 45
 Leu Tyr Gln Gly Cys Gln Val Gln Gly Asn Leu Glu Leu Thr Tyr
 50 55 60
 Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile Gln Glu Val
 65 70 75 80
 Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln Val Pro Leu
 85 90 95
 Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu Asp Asn Tyr
 100 105 110
 Ala Leu Ala Val Leu Asp Asn Gly Asp Pro Leu Asn Asn Thr Thr Pro
 115 120 125
 Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln Leu Arg Ser
 130 135 140
 Leu Thr Glu Ile Leu Lys Gly Gly Val Leu Ile Gln Arg Asn Pro Gln
 145 150 155 160
 Leu Cys Tyr Gln Asp Thr Ile Leu Trp Lys Asp Ile Phe His Lys Asn
 165 170 175
 Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser Arg Ala Cys
 180 185 190
 His Pro Cys Ser Pro Met Cys Lys Gly Ser Arg Cys Trp Gly Glu Ser
 195 200 205
 Ser Glu Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala Gly Gly Cys
 210 215 220
 Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His Glu Gln Cys
 225 230 235 240
 Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu Ala Cys Leu
 245 250 255
 His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro Ala Leu Val
 260 265 270
 Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro Glu Gly Arg
 275 280 285
 Tyr Thr Phe Gly Ala Ser Cys Val Thr Ala Cys Pro Tyr Asn Tyr Leu
 290 295 300
 Ser Thr Asp Val Gly Ser Cys Thr Leu Val Cys Pro Leu His Asn Gln
 305 310 315 320
 Glu Val Thr Ala Glu Asp Gly Thr Gln Arg Cys Glu Lys Cys Ser Lys
 325 330 335
 Pro Cys Ala Arg Val Cys Tyr Gly Leu Gly Met Glu His Leu Arg Glu
 340 345 350
 Val Arg Ala Val Thr Ser Ala Asn Ile Gln Glu Phe Ala Gly Cys Lys
 355 360 365
 Lys Ile Phe Gly Ser Leu Ala Phe Leu Pro Glu Ser Phe Asp Gly Asp
 370 375 380

Pro Ala Ser Asn Thr Ala Pro Leu Gln Pro Glu Gln Leu Gln Val Phe
 385 390 395 400
 Glu Thr Leu Glu Glu Ile Thr Gly Tyr Leu Tyr Ile Ser Ala Trp Pro
 405 410 415
 Asp Ser Leu Pro Asp Leu Ser Val Phe Gln Asn Leu Gln Val Ile Arg
 420 425 430
 Gly Arg Ile Leu His Asn Gly Ala Tyr Ser Leu Thr Leu Gln Gly Leu
 435 440 445
 Gly Ile Ser Trp Leu Gly Leu Arg Ser Leu Arg Glu Leu Gly Ser Gly
 450 455 460
 Leu Ala Leu Ile His His Asn Thr His Leu Cys Phe Val His Thr Val
 465 470 475 480
 Pro Trp Asp Gln Leu Phe Arg Asn Pro His Gln Ala Leu Leu His Thr
 485 490 495
 Ala Asn Arg Pro Glu Asp Glu Cys Val Gly Glu Gly Leu Ala Cys His
 500 505 510
 Gln Leu Cys Ala Arg Gly His Cys Trp Gly Pro Gly Pro Thr Gln Cys
 515 520 525
 Val Asn Cys Ser Gln Phe Leu Arg Gly Gln Glu Cys Val Glu Glu Cys
 530 535 540
 Arg Val Leu Gln Gly Leu Pro Arg Glu Tyr Val Asn Ala Arg His Cys
 545 550 555 560
 Leu Pro Cys His Pro Glu Cys Gln Pro Gln Asn Gly Ser Val Thr Cys
 565 570 575
 Phe Gly Pro Glu Ala Asp Gln Cys Val Ala Cys Ala His Tyr Lys Asp
 580 585 590
 Pro Pro Phe Cys Val Ala Arg Cys Pro Ser Gly Val Lys Pro Asp Leu
 595 600 605
 Ser Tyr Met Pro Ile Trp Lys Phe Pro Asp Glu Glu Gly Ala Cys Gln
 610 615 620
 Pro Cys Pro Ile Asn Cys Thr His Ser Cys Val Asp Leu Asp Asp Lys
 625 630 635 640
 Gly Cys Pro Ala Glu Gln Arg Ala Ser Pro Leu Thr Ser Ile Val Ser
 645 650 655
 Ala Val Val Gly Ile Leu Leu Val Val Val Leu Gly Val Val Phe Gly
 660 665 670
 Ile Leu Ile Lys Arg Arg Gln Gln Lys Ile Arg Lys Tyr Thr Met Arg
 675 680 685
 Arg Leu Leu Gln Glu Thr Glu Leu Val Glu Pro Leu Thr Pro Ser Gly
 690 695 700
 Ala Met Pro Asn Gln Ala Gln Met Arg Ile Leu Lys Glu Thr Glu Leu
 705 710 715 720
 Arg Lys Val Lys Val Leu Gly Ser Gly Ala Phe Gly Thr Val Tyr Lys
 725 730 735
 Gly Ile Trp Ile Pro Asp Gly Glu Asn Val Lys Ile Pro Val Ala Ile
 740 745 750
 Lys Val Leu Arg Glu Asn Thr Ser Pro Lys Ala Asn Lys Glu Ile Leu
 755 760 765
 Asp Glu Ala Tyr Val Met Ala Gly Val Gly Ser Pro Tyr Val Ser Arg
 770 775 780
 Leu Leu Gly Ile Cys Leu Thr Ser Thr Val Gln Leu Val Thr Gln Leu
 785 790 795 800
 Met Pro Tyr Gly Cys Leu Leu Asp His Val Arg Glu Asn Arg Gly Arg
 805 810 815
 Leu Gly Ser Gln Asp Leu Leu Asn Trp Cys Met Gln Ile Ala Lys Gly
 820 825 830
 Met Ser Tyr Leu Glu Asp Val Arg Leu Val His Arg Asp Leu Ala Ala
 835 840 845
 Arg Asn Val Leu Val Lys Ser Pro Asn His Val Lys Ile Thr Asp Phe
 850 855 860
 Gly Leu Ala Arg Leu Leu Asp Ile Asp Glu Thr Glu Tyr His Ala Asp
 865 870 875 880
 Gly Gly Lys Val Pro Ile Lys Trp Met Ala Leu Glu Ser Ile Leu Arg
 885 890 895
 Arg Arg Phe Thr His Gln Ser Asp Val Trp Ser Tyr Gly Val Thr Val
 900 905 910

<213> Homo sapiens

Met	Glu	Leu	Asp	Leu	Ser	Pro	Pro	His	Leu	Ser	Ser	Ser	Pro	Glu	Asp
1			5						10					15	
Leu	Trp	Pro	Ala	Pro	Gly	Thr	Pro	Pro	Gly	Thr	Pro	Arg	Pro	Pro	Asp
			20					25					30		
Thr	Pro	Leu	Pro	Glu	Glu	Val	Lys	Arg	Ser	Gln	Pro	Leu	Leu	Ile	Pro
		35					40					45			
Thr	Thr	Gly	Arg	Lys	Leu	Arg	Glu	Glu	Glu	Arg	Arg	Ala	Thr	Ser	Leu
	50					55					60				

Pro Ser Ile Pro Asn Pro Phe Pro Glu Leu Cys Ser Pro Pro Ser Gln
 65 70 75 80
 Ser Pro Ile Leu Gly Gly Pro Ser Ser Ala Arg Gly Leu Leu Pro Arg
 85 90 95
 Asp Ala Ser Arg Pro His Val Val Lys Val Tyr Ser Glu Asp Gly Ala
 100 105 110
 Cys Arg Ser Val Glu Val Ala Ala Gly Ala Thr Ala Arg His Val Cys
 115 120 125
 Glu Met Leu Val Gln Arg Ala His Ala Leu Ser Asp Glu Thr Trp Gly
 130 135 140
 Leu Val Glu Cys His Pro His Leu Ala Leu Glu Arg Gly Leu Glu Asp
 145 150 155 160
 His Glu Ser Val Val Glu Val Gln Ala Ala Trp Pro Val Gly Gly Asp
 165 170 175
 Ser Arg Phe Val Phe Arg Lys Asn Phe Ala Lys Tyr Glu Leu Phe Lys
 180 185 190
 Ser Ser Pro His Ser Leu Phe Pro Glu Lys Met Val Ser Ser Cys Leu
 195 200 205
 Asp Ala His Thr Gly Ile Ser His Glu Asp Leu Ile Gln Asn Phe Leu
 210 215 220
 Asn Ala Gly Ser Phe Pro Glu Ile Gln Gly Phe Leu Gln Leu Arg Gly
 225 230 235 240
 Ser Gly Arg Lys Leu Trp Lys Arg Phe Phe Cys Phe Leu Arg Arg Ser
 245 250 255
 Gly Leu Tyr Tyr Ser Thr Lys Gly Thr Ser Lys Asp Pro Arg His Leu
 260 265 270
 Gln Tyr Val Ala Asp Val Asn Glu Ser Asn Val Tyr Val Val Thr Gln
 275 280 285
 Gly Arg Lys Leu Tyr Gly Met Pro Thr Asp Phe Gly Phe Cys Val Lys
 290 295 300
 Pro Asn Lys Leu Arg Asn Gly His Lys Gly Leu Arg Ile Phe Cys Ser
 305 310 315 320
 Glu Asp Glu Gln Ser Arg Thr Cys Trp Leu Ala Ala Phe Arg Leu Phe
 325 330 335
 Lys Tyr Gly Val Gln Leu Tyr Lys Asn Tyr Gln Gln Ala Gln Ser Arg
 340 345 350
 His Leu His Pro Ser Cys Leu Gly Ser Pro Pro Leu Arg Ser Ala Ser
 355 360 365
 Asp Asn Thr Leu Val Ala Met Asp Phe Ser Gly His Ala Gly Arg Val
 370 375 380
 Ile Glu Asn Pro Arg Glu Ala Leu Ser Val Ala Leu Glu Glu Ala Gln
 385 390 395 400
 Ala Trp Arg Lys Lys Thr Asn His Arg Leu Ser Leu Pro Met Pro Ala
 405 410 415
 Ser Gly Thr Ser Leu Ser Ala Ala Ile His Arg Thr Gln Leu Trp Phe
 420 425 430
 His Gly Arg Ile Ser Arg Glu Glu Ser Gln Arg Leu Ile Gly Gln Gln
 435 440 445
 Gly Leu Val Asp Gly Leu Phe Leu Val Arg Glu Ser Gln Arg Asn Pro
 450 455 460
 Gln Gly Phe Val Leu Ser Leu Cys His Leu Gln Lys Val Lys His Tyr
 465 470 475 480
 Leu Ile Leu Pro Ser Glu Glu Glu Gly Arg Leu Tyr Phe Ser Met Asp
 485 490 495
 Asp Gly Gln Thr Arg Phe Thr Asp Leu Leu Gln Leu Val Glu Phe His
 500 505 510
 Gln Leu Asn Arg Gly Ile Leu Pro Cys Leu Leu Arg His Cys Cys Thr
 515 520 525
 Arg Val Ala Leu
 530
 <210> 38
 <211> 534
 <212> PRT

<213> Homo sapiens

<400> 38

```

Met Lys Gln Glu Gly Ser Ala Arg Arg Arg Gly Ala Asp Lys Ala Lys
1      5      10      15
Pro Pro Pro Gly Gly Glu Gln Glu Pro Pro Pro Pro Ala Pro
20      25      30
Gln Asp Val Glu Met Lys Glu Glu Ala Ala Thr Gly Gly Gly Ser Thr
35      40      45
Gly Glu Ala Asp Gly Lys Thr Ala Ala Ala Ala Val Glu His Ser Gln
50      55      60
Arg Glu Leu Asp Thr Val Thr Leu Glu Asp Ile Lys Glu His Val Lys
65      70      75      80
Gln Leu Glu Lys Ala Val Ser Gly Lys Glu Pro Arg Phe Val Leu Arg
85      90      95
Ala Leu Arg Met Leu Pro Ser Thr Ser Arg Arg Leu Asn His Tyr Val
100     105     110
Leu Tyr Lys Ala Val Gln Gly Phe Phe Thr Ser Asn Asn Ala Thr Arg
115     120     125
Asp Phe Leu Leu Pro Phe Leu Glu Glu Pro Met Asp Thr Glu Ala Asp
130     135     140
Leu Gln Phe Arg Pro Arg Thr Gly Lys Ala Ala Ser Thr Pro Leu Leu
145     150     155     160
Pro Glu Val Glu Ala Tyr Leu Gln Leu Leu Val Val Ile Phe Met Met
165     170     175
Asn Ser Lys Arg Tyr Lys Glu Ala Gln Lys Ile Ser Asp Asp Leu Met
180     185     190
Gln Lys Ile Ser Thr Gln Asn Arg Arg Ala Leu Asp Leu Val Ala Ala
195     200     205
Lys Cys Tyr Tyr Tyr His Ala Arg Val Tyr Glu Phe Leu Asp Lys Leu
210     215     220
Asp Val Val Arg Ser Phe Leu His Ala Arg Leu Arg Thr Ala Thr Leu
225     230     235     240
Arg His Asp Ala Asp Gly Gln Ala Thr Leu Leu Asn Leu Leu Leu Arg
245     250     255
Asn Tyr Leu His Tyr Ser Leu Tyr Asp Gln Ala Glu Lys Leu Val Ser
260     265     270
Lys Ser Val Phe Pro Glu Gln Ala Asn Asn Asn Glu Trp Ala Arg Tyr
275     280     285
Leu Tyr Tyr Thr Gly Arg Ile Lys Ala Ile Gln Leu Glu Tyr Ser Glu
290     295     300
Ala Arg Arg Thr Met Thr Asn Ala Leu Arg Lys Ala Pro Gln His Thr
305     310     315     320
Ala Val Gly Phe Lys Gln Thr Val His Lys Leu Leu Ile Val Val Glu
325     330     335
Leu Leu Leu Gly Glu Ile Pro Asp Arg Leu Gln Phe Arg Gln Pro Ser
340     345     350
Leu Lys Arg Ser Leu Met Pro Tyr Phe Leu Leu Thr Gln Ala Val Arg
355     360     365
Thr Gly Asn Leu Ala Lys Phe Asn Gln Val Leu Asp Gln Phe Gly Glu
370     375     380
Lys Phe Gln Ala Asp Gly Thr Tyr Thr Leu Ile Ile Arg Leu Arg His
385     390     395     400
Asn Val Ile Lys Thr Gly Val Arg Met Ile Ser Leu Ser Tyr Ser Arg
405     410     415
Ile Ser Leu Ala Asp Ile Ala Gln Lys Leu Gln Leu Asp Ser Pro Glu
420     425     430
Asp Ala Glu Phe Ile Val Ala Lys Ala Ile Arg Asp Gly Val Ile Glu
435     440     445
Ala Ser Ile Asn His Glu Lys Gly Tyr Val Gln Ser Lys Glu Met Ile
450     455     460
Asp Ile Tyr Ser Thr Arg Glu Pro Gln Leu Ala Phe His Gln Arg Ile
465     470     475     480

```

Ser Phe Cys Leu Asp Ile His Asn Met Ser Val Lys Ala Met Arg Phe
 485 490 495
 Pro Pro Lys Ser Tyr Asn Lys Asp Leu Glu Ser Ala Glu Glu Arg Arg
 500 505 510
 Glu Arg Glu Gln Gln Asp Leu Glu Phe Ala Lys Glu Met Ala Glu Asp
 515 520 525
 Asp Asp Asp Ser Phe Pro
 530
 <210> 39
 <211> 207
 <212> PRT
 <213> Homo sapiens

<400> 39
 Met Ala Gly Pro Ala Thr Gln Ser Pro Met Lys Leu Met Ala Leu Gln
 1 5 10 15
 Leu Leu Leu Trp His Ser Ala Leu Trp Thr Val Gln Glu Ala Thr Pro
 20 25 30
 Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys Cys Leu
 35 40 45
 Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln Glu Lys
 50 55 60
 Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu
 65 70 75 80
 Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser
 85 90 95
 Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His
 100 105 110
 Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile
 115 120 125
 Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val Ala
 130 135 140
 Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly Met Ala
 145 150 155 160
 Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala Ser Ala
 165 170 175
 Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu Gln Ser
 180 185 190
 Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln Pro
 195 200 205
 <210> 40
 <211> 989
 <212> PRT
 <213> Homo sapiens

<400> 40
 Met Lys Val Val Asn Leu Lys Gln Ala Ile Leu Gln Ala Trp Lys Glu
 1 5 10 15
 Arg Trp Ser Tyr Tyr Gln Trp Ala Ile Asn Met Lys Lys Phe Phe Pro
 20 25 30
 Lys Gly Ala Thr Trp Asp Ile Leu Asn Leu Ala Asp Ala Leu Leu Glu
 35 40 45
 Gln Ala Met Ile Gly Pro Ser Pro Asn Pro Leu Ile Leu Ser Tyr Leu
 50 55 60
 Lys Tyr Ala Ile Ser Ser Gln Met Val Ser Tyr Ser Ser Val Leu Thr
 65 70 75 80

Ile Lys Gly Lys Val Cys Ser Leu Ala Val Cys Ala Val Ala Trp Leu
 610 615 620
 Val Ala His Val Arg Met Leu Gly Leu Asp Glu Arg Glu Lys Ser Leu
 625 630 635 640
 Gln Met Ile Arg Gln Leu Ala Gly Pro Leu Phe Ser Glu Asn Thr Leu
 645 650 655
 Gln Phe Tyr Asn Glu Arg Val Val Ile Met Asn Ser Ile Leu Glu Arg
 660 665 670
 Met Cys Ala Asp Val Leu Gln Gln Thr Ala Thr Gln Ile Lys Phe Pro
 675 680 685
 Ser Thr Gly Val Asp Thr Met Pro Tyr Trp Asn Leu Leu Pro Pro Lys
 690 695 700
 Arg Pro Ile Lys Glu Val Leu Thr Asp Ile Phe Ala Lys Val Leu Glu
 705 710 715 720
 Lys Gly Trp Val Asp Ser Arg Ser Ile His Ile Phe Asp Thr Leu Leu
 725 730 735
 His Met Gly Gly Val Tyr Trp Phe Cys Asn Asn Leu Ile Lys Glu Leu
 740 745 750
 Leu Lys Glu Thr Arg Lys Glu His Thr Leu Arg Ala Val Glu Leu Leu
 755 760 765
 Tyr Ser Ile Phe Cys Leu Asp Met Gln Gln Val Thr Leu Val Leu Leu
 770 775 780
 Gly His Ile Leu Pro Gly Leu Leu Thr Asp Ser Ser Lys Trp His Ser
 785 790 795 800
 Leu Met Asp Pro Pro Gly Thr Ala Leu Ala Lys Leu Ala Val Trp Cys
 805 810 815
 Ala Leu Ser Ser Tyr Ser Ser His Lys Gly Gln Ala Ser Thr Arg Gln
 820 825 830
 Lys Lys Arg His Arg Glu Asp Ile Glu Asp Tyr Ile Ser Leu Phe Pro
 835 840 845
 Leu Asp Asp Val Gln Pro Ser Lys Leu Met Arg Leu Leu Ser Ser Asn
 850 855 860
 Glu Asp Asp Ala Asn Ile Leu Ser Ser Pro Thr Asp Arg Ser Met Ser
 865 870 875 880
 Ser Ser Leu Ser Ala Ser Gln Leu His Thr Val Asn Met Arg Asp Pro
 885 890 895
 Leu Asn Arg Val Leu Ala Asn Leu Phe Leu Leu Ile Ser Ser Ile Leu
 900 905 910
 Gly Ser Arg Thr Ala Gly Pro His Thr Gln Phe Val Gln Trp Phe Met
 915 920 925
 Glu Glu Cys Val Asp Cys Leu Glu Gln Gly Gly Arg Gly Ser Val Leu
 930 935 940
 Gln Phe Met Pro Phe Thr Thr Val Ser Glu Leu Val Lys Val Ser Ala
 945 950 955 960
 Met Ser Ser Pro Lys Val Val Leu Ala Ile Thr Asp Leu Ser Leu Pro
 965 970 975
 Leu Gly Arg Gln Val Ala Ala Lys Ala Ile Ala Ala Leu
 980 985

<210> 41

<211> 490

<212> PRT

<213> Homo sapiens

<400> 41

Met Glu Gln Lys Pro Ser Lys Val Glu Cys Gly Ser Asp Pro Glu Glu
 1 5 10 15
 Asn Ser Ala Arg Ser Pro Asp Gly Lys Arg Lys Arg Lys Asn Gly Gln
 20 25 30
 Cys Ser Leu Lys Thr Ser Met Ser Gly Tyr Ile Pro Ser Tyr Leu Asp
 35 40 45

Lys Asp Glu Gln Cys Val Val Cys Gly Asp Lys Ala Thr Gly Tyr His
 50 55 60
 Tyr Arg Cys Ile Thr Cys Glu Gly Cys Lys Gly Phe Phe Arg Arg Thr
 65 70 75 80
 Ile Gln Lys Asn Leu His Pro Thr Tyr Ser Cys Lys Tyr Asp Ser Cys
 85 90 95
 Cys Val Ile Asp Lys Ile Thr Arg Asn Gln Cys Gln Leu Cys Arg Phe
 100 105 110
 Lys Lys Cys Ile Ala Val Gly Met Ala Met Asp Leu Val Leu Asp Asp
 115 120 125
 Ser Lys Arg Val Ala Lys Arg Lys Leu Ile Glu Gln Asn Arg Glu Arg
 130 135 140
 Arg Arg Lys Glu Glu Met Ile Arg Ser Leu Gln Gln Arg Pro Glu Pro
 145 150 155 160
 Thr Pro Glu Glu Trp Asp Leu Ile His Ile Ala Thr Glu Ala His Arg
 165 170 175
 Ser Thr Asn Ala Gln Gly Ser His Trp Lys Gln Arg Arg Lys Phe Leu
 180 185 190
 Pro Asp Asp Ile Gly Gln Ser Pro Ile Val Ser Met Pro Asp Gly Asp
 195 200 205
 Lys Val Asp Leu Glu Ala Phe Ser Glu Phe Thr Lys Ile Ile Thr Pro
 210 215 220
 Ala Ile Thr Arg Val Val Asp Phe Ala Lys Lys Leu Pro Met Phe Ser
 225 230 235 240
 Glu Leu Pro Cys Glu Asp Gln Ile Ile Leu Leu Lys Gly Cys Cys Met
 245 250 255
 Glu Ile Met Ser Leu Arg Ala Ala Val Arg Tyr Asp Pro Glu Ser Asp
 260 265 270
 Thr Leu Thr Leu Ser Gly Glu Met Ala Val Lys Arg Glu Gln Leu Lys
 275 280 285
 Asn Gly Gly Leu Gly Val Val Ser Asp Ala Ile Phe Glu Leu Gly Lys
 290 295 300
 Ser Leu Ser Ala Phe Asn Leu Asp Asp Thr Glu Val Ala Leu Leu Gln
 305 310 315 320
 Ala Val Leu Leu Met Ser Thr Asp Arg Ser Gly Leu Leu Cys Val Asp
 325 330 335
 Lys Ile Glu Lys Ser Gln Glu Ala Tyr Leu Leu Ala Phe Glu His Tyr
 340 345 350
 Val Asn His Arg Lys His Asn Ile Pro His Phe Trp Pro Lys Leu Leu
 355 360 365
 Met Lys Glu Arg Glu Val Gln Ser Ser Ile Leu Tyr Lys Gly Ala Ala
 370 375 380
 Ala Glu Gly Arg Pro Gly Gly Ser Leu Gly Val His Pro Glu Gly Gln
 385 390 395 400
 Gln Leu Leu Gly Met His Val Val Gln Gly Pro Gln Val Arg Gln Leu
 405 410 415
 Glu Gln Gln Leu Gly Glu Ala Gly Ser Leu Gln Gly Pro Val Leu Gln
 420 425 430
 His Gln Ser Pro Lys Ser Pro Gln Gln Arg Leu Leu Glu Leu His
 435 440 445
 Arg Ser Gly Ile Leu His Ala Arg Ala Val Cys Gly Glu Asp Asp Ser
 450 455 460
 Ser Glu Ala Asp Ser Pro Ser Ser Ser Glu Glu Pro Glu Val Cys
 465 470 475 480
 Glu Asp Leu Ala Gly Asn Ala Ala Ser Pro
 485 490

<210> 42

<211> 614

<212> PRT

<213> Homo sapiens

<400> 42
 Met Thr Thr Leu Asp Ser Asn Asn Asn Thr Gly Gly Val Ile Thr Tyr
 1 5 10 15
 Ile Gly Ser Ser Gly Ser Ser Pro Ser Arg Thr Ser Pro Glu Ser Leu
 20 25 30
 Tyr Ser Asp Asn Ser Asn Gly Ser Phe Gln Ser Leu Thr Gln Gly Cys
 35 40 45
 Pro Thr Tyr Phe Pro Pro Ser Pro Thr Gly Ser Leu Thr Gln Asp Pro
 50 55 60
 Ala Arg Ser Phe Gly Ser Ile Pro Pro Ser Leu Ser Asp Asp Gly Ser
 65 70 75 80
 Pro Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Phe Tyr Asn
 85 90 95
 Gly Ser Pro Pro Gly Ser Leu Gln Val Ala Met Glu Asp Ser Ser Arg
 100 105 110
 Val Ser Pro Ser Lys Ser Thr Ser Asn Ile Thr Lys Leu Asn Gly Met
 115 120 125
 Val Leu Leu Cys Lys Val Cys Gly Asp Val Ala Ser Gly Phe His Tyr
 130 135 140
 Gly Val Leu Ala Cys Glu Gly Cys Lys Gly Phe Phe Arg Arg Ser Ile
 145 150 155 160
 Gln Gln Asn Ile Gln Tyr Lys Arg Cys Leu Lys Asn Glu Asn Cys Ser
 165 170 175
 Ile Val Arg Ile Asn Arg Asn Arg Cys Gln Gln Cys Arg Phe Lys Lys
 180 185 190
 Cys Leu Ser Val Gly Met Ser Arg Asp Ala Val Arg Phe Gly Arg Ile
 195 200 205
 Pro Lys Arg Glu Lys Gln Arg Met Leu Ala Glu Met Gln Ser Ala Met
 210 215 220
 Asn Leu Ala Asn Asn Gln Leu Ser Ser Gln Cys Pro Leu Glu Thr Ser
 225 230 235 240
 Pro Thr Gln His Pro Thr Pro Gly Pro Met Gly Pro Ser Pro Pro Pro
 245 250 255
 Ala Pro Val Pro Ser Pro Leu Val Gly Phe Ser Gln Phe Pro Gln Gln
 260 265 270
 Leu Thr Pro Pro Arg Ser Pro Ser Pro Glu Pro Thr Val Glu Asp Val
 275 280 285
 Ile Ser Gln Val Ala Arg Ala His Arg Glu Ile Phe Thr Tyr Ala His
 290 295 300
 Asp Lys Leu Gly Ser Ser Pro Gly Asn Phe Asn Ala Asn His Ala Ser
 305 310 315 320
 Gly Ser Pro Pro Ala Thr Thr Pro His Arg Trp Glu Asn Gln Gly Cys
 325 330 335
 Pro Pro Ala Pro Asn Asp Asn Asn Thr Leu Ala Ala Gln Arg His Asn
 340 345 350
 Glu Ala Leu Asn Gly Leu Arg Gln Ala Pro Ser Ser Tyr Pro Pro Thr
 355 360 365
 Trp Pro Pro Gly Pro Ala His His Ser Cys His Gln Ser Asn Ser Asn
 370 375 380
 Gly His Arg Leu Cys Pro Thr His Val Tyr Ala Ala Pro Glu Gly Lys
 385 390 395 400
 Ala Pro Ala Asn Ser Pro Arg Gln Gly Asn Ser Lys Asn Val Leu Leu
 405 410 415
 Ala Cys Pro Met Asn Met Tyr Pro His Gly Arg Ser Gly Arg Thr Val
 420 425 430
 Gln Glu Ile Trp Glu Asp Phe Ser Met Ser Phe Thr Pro Ala Val Arg
 435 440 445
 Glu Val Val Glu Phe Ala Lys His Ile Pro Gly Phe Arg Asp Leu Ser
 450 455 460
 Gln His Asp Gln Val Thr Leu Leu Lys Ala Gly Thr Phe Glu Val Leu
 465 470 475 480
 Met Val Arg Phe Ala Ser Leu Phe Asn Val Lys Asp Gln Thr Val Met
 485 490 495
 Phe Leu Ser Arg Thr Thr Tyr Ser Leu Gln Glu Leu Gly Ala Met Gly
 500 505 510

Met Gly Asp Leu Leu Ser Ala Met Phe Asp Phe Ser Glu Lys Leu Asn
 515 520 525
 Ser Leu Ala Leu Thr Glu Glu Leu Gly Leu Phe Thr Ala Val Val
 530 535 540
 Leu Val Ser Ala Asp Arg Ser Gly Met Glu Asn Ser Ala Ser Val Glu
 545 550 555 560
 Gln Leu Gln Glu Thr Leu Leu Arg Ala Leu Arg Ala Leu Val Leu Lys
 565 570 575
 Asn Arg Pro Leu Glu Thr Ser Arg Phe Thr Lys Leu Leu Leu Lys Leu
 580 585 590
 Pro Asp Leu Arg Thr Leu Asn Asn Met His Ser Glu Lys Leu Leu Ser
 595 600 605
 Phe Arg Val Asp Ala Gln
 610

<210> 43

<211> 703

<212> PRT

<213> Homo sapiens

<400> 43

Met Ala Asp Arg Arg Arg Gln Arg Ala Ser Gln Asp Thr Glu Asp Glu
 1 5 10 15
 Glu Ser Gly Ala Ser Gly Ser Asp Ser Gly Gly Ser Pro Leu Arg Gly
 20 25 30
 Gly Gly Ser Cys Ser Gly Ser Ala Gly Gly Gly Ser Gly Ser Leu
 35 40 45
 Pro Ser Gln Arg Gly Gly Arg Thr Gly Ala Leu His Leu Arg Arg Val
 50 55 60
 Glu Ser Gly Gly Ala Lys Ser Ala Glu Glu Ser Glu Cys Glu Ser Glu
 65 70 75 80
 Asp Gly Ile Glu Gly Asp Ala Val Leu Ser Asp Tyr Glu Ser Ala Glu
 85 90 95
 Asp Ser Glu Gly Glu Gly Glu Tyr Ser Glu Glu Glu Asn Ser Lys
 100 105 110
 Val Glu Leu Lys Ser Glu Ala Asn Asp Ala Val Asn Ser Ser Thr Lys
 115 120 125
 Glu Glu Lys Gly Glu Glu Lys Pro Asp Thr Lys Ser Thr Val Thr Gly
 130 135 140
 Glu Arg Gln Ser Gly Asp Gly Gln Glu Ser Thr Glu Pro Val Glu Asn
 145 150 155 160
 Lys Val Gly Lys Lys Gly Pro Lys His Leu Asp Asp Asp Glu Asp Arg
 165 170 175
 Lys Asn Pro Ala Tyr Ile Pro Arg Lys Gly Leu Phe Phe Glu His Asp
 180 185 190
 Leu Arg Gly Gln Thr Gln Glu Glu Glu Val Arg Pro Lys Gly Arg Gln
 195 200 205
 Arg Lys Leu Trp Lys Asp Glu Gly Arg Trp Glu His Asp Lys Phe Arg
 210 215 220
 Glu Asp Glu Gln Ala Pro Lys Ser Arg Gln Glu Leu Ile Ala Leu Tyr
 225 230 235 240
 Gly Tyr Asp Ile Arg Ser Ala His Asn Pro Asp Asp Ile Lys Pro Arg
 245 250 255
 Arg Ile Arg Lys Pro Arg Tyr Gly Ser Pro Pro Gln Arg Asp Pro Asn
 260 265 270
 Trp Asn Gly Glu Arg Leu Asn Lys Ser His Arg His Gln Gly Leu Gly
 275 280 285
 Gly Thr Leu Pro Pro Arg Thr Phe Ile Asn Arg Asn Ala Ala Gly Thr
 290 295 300
 Gly Arg Met Ser Ala Pro Arg Asn Tyr Ser Arg Ser Gly Gly Phe Lys
 305 310 315 320

<213> Homo sapiens

Met	Pro	Gln	Thr	Arg	Ser	Gln	Ala	Gln	Ala	Thr	Ile	Ser	Phe	Pro	Lys
1				5					10					15	
Arg	Lys	Leu	Ser	Arg	Ala	Leu	Asn	Lys	Ala	Lys	Asn	Ser	Ser	Asp	Ala
		20						25					30		
Lys	Leu	Glu	Pro	Thr	Asn	Val	Gln	Thr	Val	Thr	Cys	Ser	Pro	Arg	Val
		35					40					45			

Lys Ala Leu Pro Leu Ser Pro Arg Lys Arg Leu Gly Asp Asp Asn Leu
 50 55 60
 Cys Asn Thr Pro His Leu Pro Pro Cys Ser Pro Pro Lys Gln Gly Lys
 65 70 75 80
 Lys Glu Asn Gly Pro His Ser His Thr Leu Lys Gly Arg Arg Leu
 85 90 95
 Val Phe Asp Asn Gln Leu Thr Ile Lys Ser Pro Ser Lys Arg Glu Leu
 100 105 110
 Ala Lys Val His Gln Asn Lys Ile Leu Ser Ser Val Arg Lys Ser Gln
 115 120 125
 Glu Ile Thr Thr Asn Ser Glu Gln Arg Cys Pro Leu Lys Lys Glu Ser
 130 135 140
 Ala Cys Val Arg Leu Phe Lys Gln Glu Gly Thr Cys Tyr Gln Gln Ala
 145 150 155 160
 Lys Leu Val Leu Asn Thr Ala Val Pro Asp Arg Leu Pro Ala Arg Glu
 165 170 175
 Arg Glu Met Asp Val Ile Arg Asn Phe Leu Arg Glu His Ile Cys Gly
 180 185 190
 Lys Lys Ala Gly Ser Leu Tyr Leu Ser Gly Ala Pro Gly Thr Gly Lys
 195 200 205
 Thr Ala Cys Leu Ser Arg Ile Leu Gln Asp Leu Lys Lys Glu Leu Lys
 210 215 220
 Gly Phe Lys Thr Ile Met Leu Asn Cys Met Ser Leu Arg Thr Ala Gln
 225 230 235 240
 Ala Val Phe Pro Ala Ile Ala Gln Glu Ile Cys Gln Glu Glu Val Ser
 245 250 255
 Arg Pro Ala Gly Lys Asp Met Met Arg Lys Leu Glu Lys His Met Thr
 260 265 270
 Ala Glu Lys Gly Pro Met Ile Val Leu Val Leu Asp Glu Met Asp Gln
 275 280 285
 Leu Asp Ser Lys Gly Gln Asp Val Leu Tyr Thr Leu Phe Glu Trp Pro
 290 295 300
 Trp Leu Ser Asn Ser His Leu Val Leu Ile Gly Ile Ala Asn Thr Leu
 305 310 315 320
 Asp Leu Thr Asp Arg Ile Leu Pro Arg Leu Gln Ala Arg Glu Lys Cys
 325 330 335
 Lys Pro Gln Leu Leu Asn Phe Pro Pro Tyr Thr Arg Asn Gln Ile Val
 340 345 350
 Thr Ile Leu Gln Asp Arg Leu Asn Gln Val Ser Arg Asp Gln Val Leu
 355 360 365
 Asp Asn Ala Ala Val Gln Phe Cys Ala Arg Lys Val Ser Ala Val Ser
 370 375 380
 Gly Asp Val Arg Lys Ala Leu Asp Val Cys Arg Arg Ala Ile Glu Ile
 385 390 395 400
 Val Glu Ser Asp Val Lys Ser Gln Thr Ile Leu Lys Pro Leu Ser Glu
 405 410 415
 Cys Lys Ser Pro Ser Glu Pro Leu Ile Pro Lys Arg Val Gly Leu Ile
 420 425 430
 His Ile Ser Gln Val Ile Ser Glu Val Asp Gly Asn Arg Met Thr Leu
 435 440 445
 Ser Gln Glu Gly Ala Gln Asp Ser Phe Pro Leu Gln Gln Lys Ile Leu
 450 455 460
 Val Cys Ser Leu Met Leu Leu Ile Arg Gln Leu Lys Ile Lys Glu Val
 465 470 475 480
 Thr Leu Gly Lys Leu Tyr Glu Ala Tyr Ser Lys Val Cys Arg Lys Gln
 485 490 495
 Gln Val Ala Ala Val Asp Gln Ser Glu Cys Leu Ser Leu Ser Gly Leu
 500 505 510
 Leu Glu Ala Arg Gly Ile Leu Gly Leu Lys Arg Asn Lys Glu Thr Arg
 515 520 525
 Leu Thr Lys Val Phe Phe Lys Ile Glu Glu Lys Glu Ile Glu His Ala
 530 535 540
 Leu Lys Asp Lys Ala Leu Ile Gly Asn Ile Leu Ala Thr Gly Leu Pro
 545 550 555 560
 <210> 45

<211> 462

<212> PRT

<213> Homo sapiens

<400> 45

```

Met Ala Ser Asn Ser Ser Ser Cys Pro Thr Pro Gly Gly Gly His Leu
1      5      10      15
Asn Gly Tyr Pro Val Pro Pro Tyr Ala Phe Phe Phe Pro Pro Met Leu
20     25     30
Gly Gly Leu Ser Pro Pro Gly Ala Leu Thr Thr Leu Gln His Gln Leu
35     40     45
Pro Val Ser Gly Tyr Ser Thr Pro Ser Pro Ala Thr Ile Glu Thr Gln
50     55     60
Ser Ser Ser Ser Glu Glu Ile Val Pro Ser Pro Pro Ser Pro Pro Pro
65     70     75     80
Leu Pro Arg Ile Tyr Lys Pro Cys Phe Val Cys Gln Asp Lys Ser Ser
85     90     95
Gly Tyr His Tyr Gly Val Ser Ala Cys Glu Gly Cys Lys Gly Phe Phe
100    105    110
Arg Arg Ser Ile Gln Lys Asn Met Val Tyr Thr Cys His Arg Asp Lys
115    120    125
Asn Cys Ile Ile Asn Lys Val Thr Arg Asn Arg Cys Gln Tyr Cys Arg
130    135    140
Leu Gln Lys Cys Phe Glu Val Gly Met Ser Lys Glu Ser Val Arg Asn
145    150    155    160
Asp Arg Asn Lys Lys Lys Lys Glu Val Pro Lys Pro Glu Cys Ser Glu
165    170    175
Ser Tyr Thr Leu Thr Pro Glu Val Gly Glu Leu Ile Glu Lys Val Arg
180    185    190
Lys Ala His Gln Glu Thr Phe Pro Ala Leu Cys Gln Leu Gly Lys Tyr
195    200    205
Thr Thr Asn Asn Ser Ser Glu Gln Arg Val Ser Leu Asp Ile Asp Leu
210    215    220
Trp Asp Lys Phe Ser Glu Leu Ser Thr Lys Cys Ile Ile Lys Thr Val
225    230    235    240
Glu Phe Ala Lys Gln Leu Pro Gly Phe Thr Thr Leu Thr Ile Ala Asp
245    250    255
Gln Ile Thr Leu Leu Lys Ala Ala Cys Leu Asp Ile Leu Ile Leu Arg
260    265    270
Ile Cys Thr Arg Tyr Thr Pro Glu Gln Asp Thr Met Thr Phe Ser Asp
275    280    285
Gly Leu Thr Leu Asn Arg Thr Gln Met His Asn Ala Gly Phe Gly Pro
290    295    300
Leu Thr Asp Leu Val Phe Ala Phe Ala Asn Gln Leu Leu Pro Leu Glu
305    310    315    320
Met Asp Asp Ala Glu Thr Gly Leu Leu Ser Ala Ile Cys Leu Ile Cys
325    330    335
Gly Asp Arg Gln Asp Leu Glu Gln Pro Asp Arg Val Asp Met Leu Gln
340    345    350
Glu Pro Leu Leu Glu Ala Leu Lys Val Tyr Val Arg Lys Arg Arg Pro
355    360    365
Ser Arg Pro His Met Phe Pro Lys Met Leu Met Lys Ile Thr Asp Leu
370    375    380
Arg Ser Ile Ser Ala Lys Gly Ala Glu Arg Val Ile Thr Leu Lys Met
385    390    395    400
Glu Ile Pro Gly Ser Met Pro Pro Leu Ile Gln Glu Met Leu Glu Asn
405    410    415
Ser Glu Gly Leu Asp Thr Leu Ser Gly Gln Pro Gly Gly Gly Arg
420    425    430
Asp Gly Gly Gly Leu Ala Pro Pro Pro Gly Ser Cys Ser Pro Ser Leu
435    440    445

```

Ser Pro Ser Ser Asn Arg Ser Ser Pro Ala Thr His Ser Pro
 450 455 460

<210> 46

<211> 1531

<212> PRT

<213> Homo sapiens

<400> 46

Met Glu Val Ser Pro Leu Gln Pro Val Asn Glu Asn Met Gln Val Asn
 1 5 10 15
 Lys Ile Lys Lys Asn Glu Asp Ala Lys Lys Arg Leu Ser Val Glu Arg
 20 25 30
 Ile Tyr Gln Lys Lys Thr Gln Leu Glu His Ile Leu Leu Arg Pro Asp
 35 40 45
 Thr Tyr Ile Gly Ser Val Glu Leu Val Thr Gln Gln Met Trp Val Tyr
 50 55 60
 Asp Glu Asp Val Gly Ile Asn Tyr Arg Glu Val Thr Phe Val Pro Gly
 65 70 75 80
 Leu Tyr Lys Ile Phe Asp Glu Ile Leu Val Asn Ala Ala Asp Asn Lys
 85 90 95
 Gln Arg Asp Pro Lys Met Ser Cys Ile Arg Val Thr Ile Asp Pro Glu
 100 105 110
 Asn Asn Leu Ile Ser Ile Trp Asn Asn Gly Lys Gly Ile Pro Val Val
 115 120 125
 Glu His Lys Val Glu Lys Met Tyr Val Pro Ala Leu Ile Phe Gly Gln
 130 135 140
 Leu Leu Thr Ser Ser Asn Tyr Asp Asp Glu Lys Lys Val Thr Gly
 145 150 155 160
 Gly Arg Asn Gly Tyr Gly Ala Lys Leu Cys Asn Ile Phe Ser Thr Lys
 165 170 175
 Phe Thr Val Glu Thr Ala Ser Arg Glu Tyr Lys Lys Met Phe Lys Gln
 180 185 190
 Thr Trp Met Asp Asn Met Gly Arg Ala Gly Glu Met Glu Leu Lys Pro
 195 200 205
 Phe Asn Gly Glu Asp Tyr Thr Cys Ile Thr Phe Gln Pro Asp Leu Ser
 210 215 220
 Lys Phe Lys Met Gln Ser Leu Asp Lys Asp Ile Val Ala Leu Met Val
 225 230 235 240
 Arg Arg Ala Tyr Asp Ile Ala Gly Ser Thr Lys Asp Val Lys Val Phe
 245 250 255
 Leu Asn Gly Asn Lys Leu Pro Val Lys Gly Phe Arg Ser Tyr Val Asp
 260 265 270
 Met Tyr Leu Lys Asp Lys Leu Asp Glu Thr Gly Asn Ser Leu Lys Val
 275 280 285
 Ile His Glu Gln Val Asn His Arg Trp Glu Val Cys Leu Thr Met Ser
 290 295 300
 Glu Lys Gly Phe Gln Gln Ile Ser Phe Val Asn Ser Ile Ala Thr Ser
 305 310 315 320
 Lys Gly Gly Arg His Val Asp Tyr Val Ala Asp Gln Ile Val Thr Lys
 325 330 335
 Leu Val Asp Val Val Lys Lys Lys Asn Lys Gly Gly Val Ala Val Lys
 340 345 350
 Ala His Gln Val Lys Asn His Met Trp Ile Phe Val Asn Ala Leu Ile
 355 360 365
 Glu Asn Pro Thr Phe Asp Ser Gln Thr Lys Glu Asn Met Thr Leu Gln
 370 375 380
 Pro Lys Ser Phe Gly Ser Thr Cys Gln Leu Ser Glu Lys Phe Ile Lys
 385 390 395 400
 Ala Ala Ile Gly Cys Gly Ile Val Glu Ser Ile Leu Asn Trp Val Lys
 405 410 415

Phe Lys Ala Gln Val Gln Leu Asn Lys Lys Cys Ser Ala Val Lys His
 420 425 430
 Asn Arg Ile Lys Gly Ile Pro Lys Leu Asp Asp Ala Asn Asp Ala Gly
 435 440 445
 Gly Arg Asn Ser Thr Glu Cys Thr Leu Ile Leu Thr Glu Gly Asp Ser
 450 455 460
 Ala Lys Thr Leu Ala Val Ser Gly Leu Gly Val Val Gly Arg Asp Lys
 465 470 475 480
 Tyr Gly Val Phe Pro Leu Arg Gly Lys Ile Leu Asn Val Arg Glu Ala
 485 490 495
 Ser His Lys Gln Ile Met Glu Asn Ala Glu Ile Asn Asn Ile Ile Lys
 500 505 510
 Ile Val Gly Leu Gln Tyr Lys Lys Asn Tyr Glu Asp Glu Asp Ser Leu
 515 520 525
 Lys Thr Leu Arg Tyr Gly Lys Ile Met Ile Met Thr Asp Gln Asp Gln
 530 535 540
 Asp Gly Ser His Ile Lys Gly Leu Leu Ile Asn Phe Ile His His Asn
 545 550 555 560
 Trp Pro Ser Leu Leu Arg His Arg Phe Leu Glu Glu Phe Ile Thr Pro
 565 570 575
 Ile Val Lys Val Ser Lys Asn Lys Gln Glu Met Ala Phe Tyr Ser Leu
 580 585 590
 Pro Glu Phe Glu Glu Trp Lys Ser Ser Thr Pro Asn His Lys Lys Trp
 595 600 605
 Lys Val Lys Tyr Tyr Lys Gly Leu Gly Thr Ser Thr Ser Lys Glu Ala
 610 615 620
 Lys Glu Tyr Phe Ala Asp Met Lys Arg His Arg Ile Gln Phe Lys Tyr
 625 630 635 640
 Ser Gly Pro Glu Asp Asp Ala Ala Ile Ser Leu Ala Phe Ser Lys Lys
 645 650 655
 Gln Ile Asp Asp Arg Lys Glu Trp Leu Thr Asn Phe Met Glu Asp Arg
 660 665 670
 Arg Gln Arg Lys Leu Leu Gly Leu Pro Glu Asp Tyr Leu Tyr Gly Gln
 675 680 685
 Thr Thr Thr Tyr Leu Thr Tyr Asn Asp Phe Ile Asn Lys Glu Leu Ile
 690 695 700
 Leu Phe Ser Asn Ser Asp Asn Glu Arg Ser Ile Pro Ser Met Val Asp
 705 710 715 720
 Gly Leu Lys Pro Gly Gln Arg Lys Val Leu Phe Thr Cys Phe Lys Arg
 725 730 735
 Asn Asp Lys Arg Glu Val Lys Val Ala Gln Leu Ala Gly Ser Val Ala
 740 745 750
 Glu Met Ser Ser Tyr His His Gly Glu Met Ser Leu Met Met Thr Ile
 755 760 765
 Ile Asn Leu Ala Gln Asn Phe Val Gly Ser Asn Asn Leu Asn Leu Leu
 770 775 780
 Gln Pro Ile Gly Gln Phe Gly Thr Arg Leu His Gly Gly Lys Asp Ser
 785 790 795 800
 Ala Ser Pro Arg Tyr Ile Phe Thr Met Leu Ser Ser Leu Ala Arg Leu
 805 810 815
 Leu Phe Pro Pro Lys Asp Asp His Thr Leu Lys Phe Leu Tyr Asp Asp
 820 825 830
 Asn Gln Arg Val Glu Pro Glu Trp Tyr Ile Pro Ile Ile Pro Met Val
 835 840 845
 Leu Ile Asn Gly Ala Glu Gly Ile Gly Thr Gly Trp Ser Cys Lys Ile
 850 855 860
 Pro Asn Phe Asp Val Arg Glu Ile Val Asn Asn Ile Arg Arg Leu Met
 865 870 875 880
 Asp Gly Glu Glu Pro Leu Pro Met Leu Pro Ser Tyr Lys Asn Phe Lys
 885 890 895
 Gly Thr Ile Glu Glu Leu Ala Pro Asn Gln Tyr Val Ile Ser Gly Glu
 900 905 910
 Val Ala Ile Leu Asn Ser Thr Thr Ile Glu Ile Ser Glu Leu Pro Val
 915 920 925
 Arg Thr Trp Thr Gln Thr Tyr Lys Glu Gln Val Leu Glu Pro Met Leu
 930 935 940

- 60 -

```

Asp Pro  Ala Leu Asn Ser Gly  Val Ser Gln Lys Pro  Asp Pro Ala
1445                      1450                      1455
Lys Thr  Lys Asn Arg Arg Lys  Arg Lys Pro Ser Thr  Ser Asp Asp
1460                      1465                      1470
Ser Asp  Ser Asn Phe Glu Lys  Ile Val Ser Lys Ala  Val Thr Ser
1475                      1480                      1485
Lys Lys  Ser Lys Gly Glu Ser  Asp Asp Phe His Met  Asp Phe Asp
1490                      1495                      1500
Ser Ala  Val Ala Pro Arg Ala  Lys Ser Val Arg Ala  Lys Lys Pro
1505                      1510                      1515
Ile Lys  Tyr Leu Glu Glu Ser  Asp Glu Asp Asp Leu  Phe
1520                      1525                      1530

```

<210> 47

<211> 258

<212> PRT

<213> Homo sapiens

```

<400> 47
Met Leu Pro Leu Cys Leu Val Ala Ala Leu Leu Leu Ala Ala Gly Pro
1      5      10      15
Gly Pro Ser Leu Gly Asp Glu Ala Ile His Cys Pro Pro Cys Ser Glu
20     25     30
Glu Lys Leu Ala Arg Cys Arg Pro Val Gly Cys Glu Glu Leu Val
35     40     45
Arg Glu Pro Gly Cys Gly Cys Ala Thr Cys Ala Leu Gly Leu Gly
50     55     60
Met Pro Cys Gly Val Tyr Thr Pro Arg Cys Gly Ser Gly Leu Arg Cys
65     70     75     80
Tyr Pro Pro Arg Gly Val Glu Lys Pro Leu His Thr Leu Met His Gly
85     90     95
Gln Gly Val Cys Met Glu Leu Ala Glu Ile Glu Ala Ile Gln Glu Ser
100    105    110
Leu Gln Pro Ser Asp Lys Asp Glu Gly Asp His Pro Asn Asn Ser Phe
115    120    125
Ser Pro Cys Ser Ala His Asp Arg Arg Cys Leu Gln Lys His Phe Ala
130    135    140
Lys Ile Arg Asp Arg Ser Thr Ser Gly Gly Lys Met Lys Val Asn Gly
145    150    155    160
Ala Pro Arg Glu Asp Ala Arg Pro Val Pro Gln Gly Ser Cys Gln Ser
165    170    175
Glu Leu His Arg Ala Leu Glu Arg Leu Ala Ala Ser Gln Ser Arg Thr
180    185    190
His Glu Asp Leu Tyr Ile Ile Pro Ile Pro Asn Cys Asp Arg Asn Gly
195    200    205
Asn Phe His Pro Lys Gln Cys His Pro Ala Leu Asp Gly Gln Arg Gly
210    215    220
Lys Cys Trp Cys Val Asp Arg Lys Thr Gly Val Lys Leu Pro Gly Gly
225    230    235    240
Leu Glu Pro Lys Gly Glu Leu Asp Cys His Gln Leu Ala Asp Ser Phe
245    250    255
Arg Glu

```

<210> 48

<211> 378

<212> PRT

<213> Homo sapiens

<400> 48

```

Met Asp Leu Gly Lys Pro Met Lys Ser Val Leu Val Val Ala Leu Leu
1      5      10      15
Val Ile Phe Gln Val Cys Leu Cys Gln Asp Glu Val Thr Asp Asp Tyr
20      25      30
Ile Gly Asp Asn Thr Thr Val Asp Tyr Thr Leu Phe Glu Ser Leu Cys
35      40      45
Ser Lys Lys Asp Val Arg Asn Phe Lys Ala Trp Phe Leu Pro Ile Met
50      55      60
Tyr Ser Ile Ile Cys Phe Val Gly Leu Leu Gly Asn Gly Leu Val Val
65      70      75      80
Leu Thr Tyr Ile Tyr Phe Lys Arg Leu Lys Thr Met Thr Asp Thr Tyr
85      90      95
Leu Leu Asn Leu Ala Val Ala Asp Ile Leu Phe Leu Leu Thr Leu Pro
100     105     110
Phe Trp Ala Tyr Ser Ala Ala Lys Ser Trp Val Phe Gly Val His Phe
115     120     125
Cys Lys Leu Ile Phe Ala Ile Tyr Lys Met Ser Phe Phe Ser Gly Met
130     135     140
Leu Leu Leu Leu Cys Ile Ser Ile Asp Arg Tyr Val Ala Ile Val Gln
145     150     155     160
Ala Val Ser Ala His Arg His Arg Ala Arg Val Leu Leu Ile Ser Lys
165     170     175
Leu Ser Cys Val Gly Ile Trp Ile Leu Ala Thr Val Leu Ser Ile Pro
180     185     190
Glu Leu Leu Tyr Ser Asp Leu Gln Arg Ser Ser Ser Glu Gln Ala Met
195     200     205
Arg Cys Ser Leu Ile Thr Glu His Val Glu Ala Phe Ile Thr Ile Gln
210     215     220
Val Ala Gln Met Val Ile Gly Phe Leu Val Pro Leu Leu Ala Met Ser
225     230     235     240
Phe Cys Tyr Leu Val Ile Ile Arg Thr Leu Leu Gln Ala Arg Asn Phe
245     250     255
Glu Arg Asn Lys Ala Ile Lys Val Ile Ile Ala Val Val Val Phe
260     265     270
Ile Val Phe Gln Leu Pro Tyr Asn Gly Val Val Leu Ala Gln Thr Val
275     280     285
Ala Asn Phe Asn Ile Thr Ser Ser Thr Cys Glu Leu Ser Lys Gln Leu
290     295     300
Asn Ile Ala Tyr Asp Val Thr Tyr Ser Leu Ala Cys Val Arg Cys Cys
305     310     315     320
Val Asn Pro Phe Leu Tyr Ala Phe Ile Gly Val Lys Phe Arg Asn Asp
325     330     335
Leu Phe Lys Leu Phe Lys Asp Leu Gly Cys Leu Ser Gln Glu Gln Leu
340     345     350
Arg Gln Trp Ser Ser Cys Arg His Ile Arg Arg Ser Ser Met Ser Val
355     360     365
Glu Ala Glu Thr Thr Thr Thr Phe Ser Pro
370     375

```

<210> 49

<211> 411

<212> PRT

<213> Homo sapiens

<400> 49

```

Met Ser Lys Arg Pro Ser Tyr Ala Pro Pro Pro Thr Pro Ala Pro Ala
1      5      10      15
Thr Gln Met Pro Ser Thr Pro Gly Phe Val Gly Tyr Asn Pro Tyr Ser
20      25      30

```

<213> Homo sapiens

Met	Ser	Val	Arg	Tyr	Ser	Ser	Ser	Lys	His	Tyr	Ser	Ser	Ser	Arg	Ser
1				5					10					15	
Gly	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Cys	Gly	Gly	Gly	Gly	Gly	Val	Ser
			20					25						30	
Ser	Leu	Arg	Ile	Ser	Ser	Ser	Lys	Gly	Ser	Leu	Gly	Gly	Gly	Phe	Ser
		35					40						45		

Ser Gly Gly Phe Ser Gly Gly Ser Phe Ser Arg Gly Ser Ser Gly Gly
 50 55 60
 Gly Cys Phe Gly Gly Ser Ser Gly Gly Tyr Gly Gly Leu Gly Gly Phe
 65 70 75 80
 Gly Gly Gly Ser Phe His Gly Ser Tyr Gly Ser Ser Ser Phe Gly Gly
 85 90 95
 Ser Tyr Gly Gly Ser Phe Gly Gly Gly Asn Phe Gly Gly Gly Ser Phe
 100 105 110
 Gly Gly Gly Ser Phe Gly Gly Gly Gly Phe Gly Gly Gly Phe Gly
 115 120 125
 Gly Gly Phe Gly Gly Gly Phe Gly Gly Asp Gly Gly Leu Leu Ser Gly
 130 135 140
 Asn Glu Lys Val Thr Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr
 145 150 155 160
 Leu Asp Lys Val Arg Ala Leu Glu Glu Ser Asn Tyr Glu Leu Glu Gly
 165 170 175
 Lys Ile Lys Glu Trp Tyr Glu Lys His Gly Asn Ser His Gln Gly Glu
 180 185 190
 Pro Arg Asp Tyr Ser Lys Tyr Tyr Lys Thr Ile Asp Asp Leu Lys Asn
 195 200 205
 Gln Ile Leu Asn Leu Thr Thr Asp Asn Ala Asn Ile Leu Leu Gln Ile
 210 215 220
 Asp Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Leu Lys Tyr Glu Asn
 225 230 235 240
 Glu Val Ala Leu Arg Gln Ser Val Glu Ala Asp Ile Asn Gly Leu Arg
 245 250 255
 Arg Val Leu Asp Glu Leu Thr Leu Thr Lys Ala Asp Leu Glu Met Gln
 260 265 270
 Ile Glu Ser Leu Thr Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu
 275 280 285
 Glu Glu Met Lys Asp Leu Arg Asn Val Ser Thr Gly Asp Val Asn Val
 290 295 300
 Glu Met Asn Ala Ala Pro Gly Val Asp Leu Thr Gln Leu Leu Asn Asn
 305 310 315 320
 Met Arg Ser Gln Tyr Glu Gln Leu Ala Glu Gln Asn Arg Lys Asp Ala
 325 330 335
 Glu Ala Trp Phe Asn Glu Lys Ser Lys Glu Leu Thr Thr Glu Ile Asp
 340 345 350
 Asn Asn Ile Glu Gln Ile Ser Ser Tyr Lys Ser Glu Ile Thr Glu Leu
 355 360 365
 Arg Arg Asn Val Gln Ala Leu Glu Ile Glu Leu Gln Ser Gln Leu Ala
 370 375 380
 Leu Lys Gln Ser Leu Glu Ala Ser Leu Ala Glu Thr Glu Gly Arg Tyr
 385 390 395 400
 Cys Val Gln Leu Ser Gln Ile His Ala Gln Ile Ser Ala Leu Glu Glu
 405 410 415
 Gln Leu Gln Gln Ile Arg Ala Glu Thr Glu Cys Gln Asn Thr Glu Tyr
 420 425 430
 Gln Gln Leu Leu Asp Ile Lys Ile Arg Leu Glu Asn Glu Ile Gln Thr
 435 440 445
 Tyr Arg Ser Leu Leu Glu Gly Glu Gly Ser Ser Gly Gly Gly Gly Arg
 450 455 460
 Gly Gly Gly Ser Phe Gly Gly Gly Tyr Gly Gly Gly Ser Ser Gly Gly
 465 470 475 480
 Gly Ser Ser Gly Gly Gly Tyr Gly Gly Gly His Gly Gly Ser Ser Gly
 485 490 495
 Gly Gly Tyr Gly Gly Gly Ser Ser Gly Gly Gly Ser Ser Gly Gly Gly
 500 505 510
 Tyr Gly Gly Gly Ser Ser Ser Gly Gly His Gly Gly Gly Ser Ser Ser
 515 520 525
 Gly Gly His Gly Gly Ser Ser Ser Gly Gly Tyr Gly Gly Gly Ser Ser
 530 535 540
 Gly Gly Gly Gly Gly Gly Tyr Gly Gly Gly Ser Ser Gly Gly Gly Ser
 545 550 555 560
 Ser Ser Gly Gly Gly Tyr Gly Gly Gly Ser Ser Gly Gly His Lys
 565 570 575

Ser Ser Ser Ser Gly Ser Val Gly Glu Ser Ser Ser Lys Gly Pro Arg
 580 585 590
 Tyr

<210> 51

<211> 494

<212> PRT

<213> Homo sapiens

<400> 51

Met Asp Leu Ser Asn Asn Thr Met Ser Leu Ser Val Arg Thr Pro Gly
 1 5 10 15
 Leu Ser Arg Arg Leu Ser Ser Gln Ser Val Ile Gly Arg Pro Arg Gly
 20 25 30
 Met Ser Ala Ser Ser Val Gly Ser Tyr Gly Gly Ser Ala Phe Gly
 35 40 45
 Phe Gly Ala Ser Cys Gly Gly Gly Phe Ser Ala Ala Ser Met Phe Gly
 50 55 60
 Ser Ser Ser Gly Phe Gly Gly Gly Ser Gly Ser Ser Met Ala Gly Gly
 65 70 75 80
 Leu Gly Ala Gly Tyr Gly Arg Ala Leu Gly Gly Gly Ser Phe Gly Gly
 85 90 95
 Leu Gly Met Gly Phe Gly Gly Ser Pro Gly Gly Gly Ser Leu Gly Ile
 100 105 110
 Leu Ser Gly Asn Asp Gly Gly Leu Leu Ser Gly Ser Glu Lys Glu Thr
 115 120 125
 Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp Lys Val Arg
 130 135 140
 Ala Leu Glu Glu Ala Asn Thr Glu Leu Glu Asn Lys Ile Arg Glu Trp
 145 150 155 160
 Tyr Glu Thr Arg Gly Thr Gly Thr Ala Asp Ala Ser Gln Ser Asp Tyr
 165 170 175
 Ser Lys Tyr Tyr Pro Leu Ile Glu Asp Leu Arg Asn Lys Ile Ile Ser
 180 185 190
 Ala Ser Ile Gly Asn Ala Gln Leu Leu Leu Gln Ile Asp Asn Ala Arg
 195 200 205
 Leu Ala Ala Glu Asp Phe Arg Met Lys Tyr Glu Asn Glu Leu Ala Leu
 210 215 220
 Arg Gln Gly Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val Leu Asp
 225 230 235 240
 Glu Leu Thr Leu Thr Arg Thr Asp Leu Glu Met Gln Ile Glu Ser Leu
 245 250 255
 Asn Glu Glu Leu Ala Tyr Met Lys Lys Asn His Glu Asp Glu Leu Gln
 260 265 270
 Ser Phe Arg Val Gly Gly Pro Gly Glu Val Ser Val Glu Met Asp Ala
 275 280 285
 Ala Pro Gly Val Asp Leu Thr Arg Leu Leu Asn Asp Met Arg Ala Gln
 290 295 300
 Tyr Glu Thr Ile Ala Glu Gln Asn Arg Lys Asp Ala Glu Ala Trp Phe
 305 310 315 320
 Ile Glu Lys Ser Gly Glu Leu Arg Lys Glu Ile Ser Thr Asn Thr Glu
 325 330 335
 Gln Leu Gln Ser Ser Lys Ser Glu Val Thr Asp Leu Arg Arg Ala Phe
 340 345 350
 Gln Asn Leu Glu Ile Glu Leu Gln Ser Gln Leu Ala Met Lys Lys Ser
 355 360 365
 Leu Glu Asp Ser Leu Ala Glu Ala Glu Gly Asp Tyr Cys Ala Gln Leu
 370 375 380
 Ser Gln Val Gln Gln Leu Ile Ser Asn Leu Glu Ala Gln Leu Leu Gln
 385 390 395 400

Val Arg Ala Asp Ala Glu Arg Gln Asn Val Asp His Gln Arg Leu Leu
 405 410 415
 Asn Val Lys Ala Arg Leu Glu Leu Glu Ile Glu Thr Tyr Arg Arg Leu
 420 425 430
 Leu Asp Gly Glu Ala Gln Gly Asp Gly Leu Glu Glu Ser Leu Phe Val
 435 440 445
 Thr Asp Ser Lys Ser Gln Ala Gln Ser Thr Asp Ser Ser Lys Asp Pro
 450 455 460
 Thr Lys Thr Arg Lys Ile Lys Thr Val Val Gln Glu Met Val Asn Gly
 465 470 475 480
 Glu Val Val Ser Ser Gln Val Gln Glu Ile Glu Glu Leu Met
 485 490

<210> 52

<211> 361

<212> PRT

<213> Homo sapiens

<400> 52

Cys Asn Trp Phe Cys Glu Gly Ser Phe Asn Gly Ser Glu Lys Glu Thr
 1 5 10 15
 Met Gln Phe Leu Asn Asp Arg Leu Ala Ser Tyr Leu Glu Lys Val Arg
 20 25 30
 His Val Glu Arg Asp Asn Ala Glu Leu Glu Asn Leu Ile Arg Glu Arg
 35 40 45
 Ser Gln Gln Gln Glu Pro Leu Cys Pro Ser Tyr Gln Ser Tyr Phe
 50 55 60
 Lys Thr Ile Glu Glu Leu Gln Gln Lys Ile Leu Cys Ser Lys Ser Glu
 65 70 75 80
 Asn Ala Arg Leu Val Gln Ile Asp Asn Ala Lys Leu Ala Ala Asp
 85 90 95
 Asp Phe Arg Thr Lys Tyr Gln Thr Glu Gln Ser Leu Arg Gln Leu Val
 100 105 110
 Glu Ser Asp Ile Asn Ser Leu Arg Arg Ile Leu Asp Glu Leu Thr Leu
 115 120 125
 Cys Arg Ser Asp Leu Glu Ala Gln Met Glu Ser Leu Lys Glu Glu Leu
 130 135 140
 Leu Ser Leu Lys Gln Asn His Glu Gln Glu Val Asn Thr Leu Arg Cys
 145 150 155 160
 Gln Leu Gly Asp Arg Leu Asn Val Glu Val Asp Ala Ala Pro Ala Val
 165 170 175
 Asp Leu Asn Gln Val Leu Asn Glu Thr Arg Asn Gln Tyr Glu Ala Leu
 180 185 190
 Val Glu Thr Asn Arg Arg Glu Val Glu Gln Trp Phe Ala Thr Gln Thr
 195 200 205
 Glu Glu Leu Asn Lys Gln Val Val Ser Ser Ser Glu Gln Leu Gln Ser
 210 215 220
 Tyr Gln Ala Glu Ile Ile Glu Leu Arg Arg Thr Val Asn Ala Leu Glu
 225 230 235 240
 Ile Glu Leu Gln Ala Gln His Asn Leu Arg Tyr Ser Leu Glu Asn Thr
 245 250 255
 Leu Thr Glu Ser Glu Ala Arg Tyr Ser Ser Gln Leu Ser Gln Val Gln
 260 265 270
 Ser Leu Ile Thr Asn Val Glu Ser Gln Leu Ala Glu Ile Arg Ser Asp
 275 280 285
 Leu Glu Arg Gln Asn Gln Glu Tyr Gln Val Leu Leu Asp Val Arg Ala
 290 295 300
 Arg Leu Glu Cys Glu Ile Asn Thr Tyr Arg Ser Leu Leu Glu Ser Glu
 305 310 315 320
 Asp Cys Lys Leu Pro Ser Asn Pro Cys Ala Thr Thr Asn Ala Cys Glu
 325 330 335

Lys Pro Ile Gly Ser Cys Val Thr Asn Pro Cys Gly Pro Arg Ser Arg
 340 345 350
 Cys Gly Pro Cys Asn Thr Phe Gly Tyr
 355 360
 <210> 53
 <211> 3282
 <212> DNA
 <213> Homo sapiens

<400> 53
 atgaaggaga tggtaggagg ctgctgcgta tgttcggacg agaggggctg ggccgagaac 60
 ccgctgggtct actgcgatgg gcacgcgtgc agcgtggccg tccaccaagc ttgctatggc 120
 atcgttcagg tgccaacggg accctggttc tgccggaaat gtgaatctca ggagcgagca 180
 gccagggtga ggtgtgagct gtgcccacac aaagacgggg cattgaagag gactgataat 240
 ggaggctggg cacacgtggt gtgtgccctc tacatccccg aggtgcaatt tgccaacgtg 300
 ctccaccatgg agcccatcgt gctgcagtac gtgcctcatg atcgcttcaa caagacctgt 360
 tacatctgcg aggagacggg ccgggagagc aaggcggcct cgggagcctg catgacctgt 420
 aaccgccatg gatgtcgaca agctttccac gtcacctgtg cccaaatggc aggcttgctg 480
 tgtgaggaag aagtgtctga ggtggacaac gtcaagtact gcggctactg caaataccac 540
 ttcagcaaga tgaagacatc ccggcacagc agcgggggag gcggaggagg cgctggagga 600
 ggagggtggca gcatgggggg aggtggcagt ggtttcatct ctgggaggag aagccgggtca 660
 gcctcaccat ccacgcagca ggagaagcac cccacccacc acgagagggg ccagaagaag 720
 agtcgaaagg acaaagaacg ccttaagcag aagcacaaga agcggcctga gtgcctccc 780
 agcatcctca ccccgcccggt ggtcccccact gctgacaagg tctcctcctc ggtctcctct 840
 tctcccacc acgaggccag cacgcaggag acctctgaga gcagcaggga gtcaaagggg 900
 aaaaagtctt ccagccatag cctgagtcac aaagggaaga aactgagcag tgggaaagggt 960
 gtgagcagtt ttacctccgc ctctctctct tctcctcctc ctctcctcctc ctctgggggg 1020
 cccttccagc ctgcagtcctc gtccctgcag agctcccctg acttctctgc attccccaa 1080
 ctggagcagc cagaggagga caagtactcc aagcccacag ccccgccccc ttcagcccct 1140
 tcttctccct cagctcccga gcccccaag gctgaccttt ttgagcagaa ggtgggtctt 1200
 tctggctttg ggcccatcat gcgcttctcc accaacacct ccagctcagg ccgggcccgg 1260
 gcgcccctcc ctggggacta taagtctccc cacgtcacgg ggtctggggc ctcggcaggc 1320
 acccacaac ggatgcccgc actgagtgcc acccctgtgc ctgctgatga gaccctgag 1380
 acaggcctga aggagaagaa gcacaaagcc agcaagagga gccgccatgg gccaggccgt 1440
 cccaaggga gccggaacaa ggagggcact gggggcccag ctgcccacac cttgcccagt 1500
 gccagctgg ctggctttac cgccactgct gcctcacctc tctctggagg ttccctggtc 1560
 agctcgggcc tgggaggtct gtctcccga acctttgggc cttctgggag cttgcccagc 1620
 ttgagcctgg agtccccctt actaggggca ggcattctaca ccagtaataa ggaccccatc 1680
 tcccacagtg gcgggatgct gcgggctgtc tgcagcacc ctctctcctc cagcctcctg 1740
 gggcccctgg ggacctcggc cctgcccgc ctacgcctc ccccgttcac cagcacctc 1800
 cctcctctct ctgcttctat ctccaccact cagggtgttt ctctggctgg ctctacctt 1860
 agcctccctt ctaccacat ctttggaacc cccatgggtg ccgttaatcc cctcctctcc 1920
 caagctgaga gcagccacac agagccagac ctggaggact gcagcttccg gtgtcggggg 1980
 acctccctc aggagagtct gtcttccatg tcccccatca gcagcctccc cgcactcttc 2040
 gaccagacag cctctgcacc ctgtgggggc ggccagttag acccgggcgg cccagggaag 2100
 actaacatgg agcagcttct ggagaagcag ggcgacgggg aggcggcgt caacatcgtg 2160
 gagatgctga aggcgctgca cgcgctgcag aaggagaacc agcggctgca agagcagatc 2220
 ctgagcctga cggccaaaaa ggagcggctg cagattctca acgtgcagct ctctgtgccc 2280
 ttccctgccc tgectgctgc cctgcctgcc gccaacggcc ctgtccctgg gccctatggc 2340
 ctgcctcccc aagccgggag cagcgactcc ttgagcacca gcaagagccc tccgggaaag 2400
 agcagcctcg gcctggacaa ctgcctgtcc acttctctg aggaccaca ctcaggctgc 2460
 ccgagccgca gcagctcgtc gctgtccttc cacagcacgc cccacccgct gccctcctc 2520
 cagcagagcc ctgccactct gccctggcc ctgcctgggg cccctgcccc actcccgccc 2580
 cagccgcaga acgggttggg ccgggcaccc ggggcagcgg ggctgggggc catgcccatg 2640
 gctgaggggc tgttgggggg gctggcaggc agtgggggccc tgcccctcaa tgggctcctt 2700
 gggggggtga atggggccgc tgccccaac cccgcaagct tgagccaggc tggcgggccc 2760
 cccacgctgc agctgccagg ctgtctcaac agccttacag agcagcagag acatctcctt 2820
 cagcagcaag agcagcagct ccagcaactc cagcagctcc tggcctcccc gcagctgacc 2880
 ccggaacacc agactgttgt ctaccagatg atccagcaga tccagcagaa acgggagctg 2940
 cagcgtctgc agatggctgg gggctcccag ctgcccattg ccagcctgct ggcaggaagc 3000
 tccaccccgc tgctgtctgc gggtaaccct ggcctgctgc ccacagcgtc tgctccaccc 3060

ctgctgcccc	ctggagccct	agtggctccc	tgccttggca	acaacacaag	tctcatggcc	3120
gcagcagctg	cagctgcagc	agtagcagca	gcaggcggac	ctccagtcct	cactgcccag	3180
accaaccctt	tcctcagcct	gtcgggagca	gagggcagtg	gcggtggccc	caaaggaggg	3240
accgctgaca	aaggagcctc	agccaaccag	gaaaaaggct	aa		3282

<210> 54

<211> 2227

<212> DNA

<213> Homo sapiens

<400> 54

gagagcccga	acaggaagag	ggtacagctt	tgtgcaggct	acatgcccac	tgcagccctc	60
cagcctcttg	tccccagagc	ggacttttga	agctgaactg	cttttgttgc	tggaagactt	120
atgttataat	ttaccctggg	tggaccaggg	tcgtacaaaa	gggcaacgct	ccccagtcct	180
cccactcccc	accccgggaat	catgcatcgg	actacacgga	tcaaaatcac	agagctgaac	240
ccccacctca	tgtgtgcccc	ctgcgggggg	tacttcatcg	acgccaccac	tatcgtggag	300
tgctctgatt	ccttctgcaa	aacctgcata	gtgcgctacc	tgagagccaa	caaatactgc	360
cccatgtgtg	acgtgcagggt	ccataaaacc	cggccgctgc	tgagcatcag	gtctgacaaa	420
acacttcaag	acattgtcta	caaattgggt	cctgggcttt	ttaaagatga	gatgaaacgg	480
cggcggggatt	tctatgcagc	gtacccccct	acggagggtcc	ccaacggctc	caatgaggac	540
cgcggcgagg	tcttggagca	ggagaagggg	gctctgagtg	atgatgagat	tgtcagcctc	600
tccatogaat	tctacgaagg	tgccagggac	cgggatgaga	agaaggggcc	cctggagaat	660
ggggatgggg	acaaagagaa	aacaggggtg	cgcttcctgc	gatgcccagc	agccatgacc	720
gtcatgcata	ttgccaagtt	tctccgcaac	aagatggatg	tgcccagcaa	gtacaagggt	780
gagggttctgt	acgaggacga	gccactgaag	gaatactaca	ccctcatgga	catcgctctac	840
atctacccct	ggcggcgga	cgggcctctc	ccctcaagt	accgtgtcca	gccagcctgc	900
aagcggctca	ccctagccac	ggtgccccac	ccctccgagg	gcaccaacac	cagcggggcg	960
tccgagtgtg	agtcagtcag	cgacaaggct	cccagccctg	ccaccctgcc	agccacctcc	1020
tcttccctgc	ccagcccagc	caccccatcc	catggctctc	ccagttccca	tgggcctcca	1080
gccacccacc	ctacctcccc	cactccccct	tcgacagcca	gtggggccac	cacagctgcc	1140
aacgggggta	gcttgaactg	cctgcagaca	ccatcctcca	ccagcagggg	gcgcaagatg	1200
actgtcaacg	gcgtcccggt	gcccccttta	acttgaggcc	agggaccctc	tcccttcttc	1260
cagccaagcc	tctccactcc	ttccactttt	tctgggccct	tttttccact	tcttctactt	1320
tccccagctc	ttcccacctt	gggggtgggg	ggcgggtttt	ataaataaat	atatataat	1380
atgtacatag	gaaaaaccaa	atatacatac	ttattttcta	tggaaccaac	agattaattt	1440
aaatgccaca	ggaaacaaac	tttatgtgtg	tgtgtatgtg	tggaatatgg	tggtcatttt	1500
ttttgggggg	ggtcttgtgt	aatttgcgtg	ttttgggggt	gcctggagat	gaactggatg	1560
ggccactgga	gtctcaataa	agctctgcac	catcctcgct	gtttcccaag	gcagggtggtg	1620
tggtgggggg	cccttcagac	ccaaagcttt	aggcatgatt	ccaactgggt	gcatatagga	1680
gtcagttaga	attgtttctt	tctctccccg	tttctctccc	catcttgggt	gctgtcctgc	1740
ctctgaccag	tgccgcggcc	ccgcgttgtt	gaatgtccag	aaattgctaa	gaacagtgcc	1800
ttttacaaat	gcagtttatc	cctggttctg	aggagcaagt	gcagggtgga	ggtggcacct	1860
gcatacacct	ctcctcttgc	agtggaaact	ttgtgcaaa	aatagatagt	tctgcctctt	1920
tttttttttt	ttcctgtgtg	tgtggccttt	gcatcattta	tcttgtggaa	aagaagattc	1980
aggccctgag	agggtctcagc	tcttggagga	gggctaaggc	tttagcattg	tgaagcgctg	2040
cacccccacc	aaccttacct	tcaccgggga	accctcacta	gcaggactgg	tggtggagtc	2100
tcacctgggg	cctagagtgg	aagtgggggt	gggttaacct	cacacaagca	cagatcccag	2160
actttgcccag	aggcaaacag	ggaattccgc	cgatactgac	gggctccagg	agtcgtcgcc	2220
acactcg						2227

<210> 55

<211> 4283

<212> DNA

<213> Homo sapiens

<400> 55

ttgcgggaaa	gagccaaacc	ctggcggttg	ggggccccgg	cggggagccc	ctcccgcggt	60
ccacagcgac	gcctgcccag	ccctcctccc	cttcgggctc	cggcacgggg	ccccgaggcg	120

ttcggaggcc	aggcggggtt	ctgtcaggcc	cggggaggag	gggcgggcgg	ggcggccgct	180
gcctccccgg	gacggggcgt	accacgcgga	cggggaggac	ggggccaggg	gactgcaggg	240
cggctgcacc	gcccgggggg	ggggtgcgga	gcgggcccgg	gggctccccg	gggcggggcg	300
ggaggggcgg	gcgtggggcg	gacggaacca	ccggggcggg	gtgggaggta	acgggacggg	360
cgcgaccatg	gcgcggtgag	ggagcggggg	tggggatcgg	tccgggggag	gcctgaggcc	420
gctggcttgt	gcgctgtctc	cgccgcccc	ctctttcgcc	gccgcggccg	ccgccccggg	480
catgtcgtcc	aactgcacca	gcaccacggc	ggtggcggtg	gcgccgctca	gcgccagcaa	540
gaccaagacc	aagaagaagc	atttcgtgtg	ccagaaagtg	aagctattcc	gggccagcga	600
gccgatcctc	agcgtcctga	tgtggggggt	gaaccacacg	atcaatgagc	tgagcaatgt	660
tccctgttcc	gtcatgtctaa	tgccagatga	cttcaaagcc	tacagcaaga	tcaaggtgga	720
caatcatctc	ttcaataaagg	agaacctgcc	cagccgcttt	aagtttaagg	agtattgccc	780
catggtgttc	cgaaccttc	gggagagggt	tggattgat	gatcaggatt	accagaattc	840
agtgcgcgc	agcggcccca	tcaacagtga	cagccagggt	cgggtgtggca	cgcgttccct	900
caccacctac	gaccggcgct	ttgtcatcaa	gactgtgtcc	agcaggagacg	tggcggagat	960
gcacaacatc	ttaaagaaat	accaccagtt	tatagtggag	tgtcatggca	acacgctttt	1020
gccacagttc	ctgggcatgt	accgcctgac	cgtggatggg	gtggaaacct	acatggtggg	1080
taccaggaac	gtgttcagcc	atcggtcac	tgtgcatcgc	aagtatgacc	tcaagggttc	1140
tacggttgcc	agagaagcga	gcgacaagga	gaaggccaag	gacttgccaa	cattcaaaga	1200
caatgacttc	ctcaatgaag	ggcagaagct	gcatgtggga	gaggagagta	aaaagaactt	1260
cctggagaaa	ctgaagcggg	acgttgagtt	cttggcacag	ctgaagatca	tggactacag	1320
ccgtgtggtg	ggcatccacg	acgtggaccg	ggcagagcag	gaggagatgg	aggtgggga	1380
gcgggcagag	gacgaggagt	gtgagaatga	tggggtgggt	ggcaacctac	tctgtcctta	1440
tggcacacct	ccggacagcc	ctggcaacct	cctcagcttt	cctcggttct	ttggtcctgg	1500
ggaattcgac	ccctctgttg	acgtctatgc	catgaaaagc	catgaaagt	cccccaagaa	1560
ggaggtgtat	ttcatggcca	tcattgatat	cctcacgcca	tacgatacaa	agaagaaagc	1620
tgcacatgct	gccaaaacgg	tgaaacacgg	ggcaggggcc	gagatctcga	ctgtgaaccc	1680
tgagcagtac	tccaaacgct	tcaacgagtt	tatgtccaac	atcctgacgt	agtctctctc	1740
taccttcagc	cagagccaga	gagctggata	tggggtcggg	gatcgggagt	tagggagaag	1800
ggtgtatttg	ggctagatgg	gagggtgagg	gcagagtcgg	gtttgggagg	gctttagcaa	1860
tgaggtgaca	gcctgtgaca	ccgaaagaga	cctttagctga	agaggagggg	gatgtgctgt	1920
gtgtgcacct	gctcacagga	tgtaacccca	cctttgtctt	acccttgatt	tttctccccc	1980
atttgacacc	cagggttaaaa	aggggttccc	tttttggtac	cttgtaacct	tttaagatac	2040
cttggggcta	gagatgactt	cgtgggttta	tttgggtttt	gtttctgaaa	tttcattgct	2100
ccaggtttgc	tattttataat	catatttcat	cagcctaccc	accctcccca	tctttgtctga	2160
gctctcagtt	cccttcaatt	aaagagatac	ccagtagacc	cagcacaagg	gtccttccag	2220
aaccaagtgc	tatggatgcc	agattggaga	ggctagacac	ctcgccctgc	tgcatttgct	2280
cttgtctgga	ttaactttgt	aatttatgga	gtattgtgca	caacttcctc	cacctttccc	2340
ttggattcaa	gtgaaaactg	ttgcattatt	cctccatcct	gtctggaata	caccagggtca	2400
acaccagaga	tctcagatca	gaatcagaga	tctcagaggg	gaataagttc	atcctcatgg	2460
gatggtgagg	ggcaggaag	cggctgggct	cctggacacc	tggttctcag	agaacctgt	2520
gatgatcacc	caagcccccag	gctgtcttag	cccctggagt	tcagaagtcc	tctctgtaaa	2580
gcctgcctcc	cactaggtca	agaggaacta	gagtaccttt	ggatttatca	ggacctcat	2640
gtttaaatgg	ttatttccct	ttgggaaaac	ttcagaaaact	gatgtatcaa	atgaggccct	2700
gtgccctcga	tctatttccct	tcttccctct	gacctcctcc	caggcactct	tacttctagc	2760
cgaacctcta	gctctgggca	gatctccaag	cgcctggagt	gcttttttagc	agagacacct	2820
cgttaagctc	cgggatgacc	ttgtaggaga	tctgtctccc	tgtgcctgga	gagttacagc	2880
cagcaagggt	cccccatctt	agagtgtggt	gtccaaacgt	gaggtggctt	cctagttaca	2940
tgaggatgtg	atccaggaaa	tccagtttgg	aggcttgatg	tgggttttga	cctggccctca	3000
gccttggggc	tgtttttcct	tgttgccccg	ctctagactt	ttagcagatc	tgcagcccac	3060
aggctttttt	ggaaggagtg	gcttccctga	ggtgttccac	ctgccttcgg	agcctgccc	3120
ccaggccctc	agaactgagc	cacaggctgc	tctggccagg	agagaaaacg	ctctgttgtt	3180
ctgcattggg	ggaggtacat	tctgcatctt	tctcaccccc	tcaaccagga	actggggatt	3240
tgggatgaga	tatggtcaga	cttgtagata	accccaaaga	tgtgaagatc	gcttgtgaaa	3300
ccattttgaa	tgaatagatt	ggtttcctgt	ggctccctcc	aaacctggcc	aagcccagct	3360
tccgaagcag	gaaccagcac	tgtctctgtg	cctgactcac	agcatatagg	tcaggaaaga	3420
atggagacgg	cattcttgga	cttcactggg	gctgctggat	tggatgggaa	accttctgga	3480
agaggcagat	gggggtcaaa	ccactgcctt	ggccccagga	agggggccata	ggtaggtctg	3540
aacaactgcc	gcaagaccac	tacatgactt	agggaaactg	aaaccaactg	gctcatggag	3600
aaaacaaatt	tgacttggga	aagggattat	gtaggaataa	tgtttggact	tgatttcccc	3660
acgtcataat	gaagaatgga	agtttgatc	tgtctcctgt	caggcgagc	atctctgaag	3720
cttggaaaagc	tgtcttccag	cctccaaacc	tggccaagcc	cagcttccga	agcaggaacc	3780
agcactgtct	ctgtgcctga	ctcacagcat	ataggtcagg	aaagaatgga	gacggcattc	3840
ttggacttca	ctggggctgc	tggattggat	gggaaacctt	ctggaagagg	cagatggggg	3900
tcaaaccact	gccttggccc	caggaagggg	ccataggtag	gtctgaacaa	ctgccgcaag	3960
accactacat	gacttaggga	acttgaaacc	aactggctca	tggagaaaac	aaatttgact	4020
tgggaaaggg	attatgtagg	aataatgttt	ggacttgatt	tccccacgtc	atgaatgaaga	4080

atggaagttt	ggatctgctc	ctcgtcaggc	gcagcatctc	tgaagcttgg	aaagctgtct	4140
tccagcagcc	tccgtggcct	cgggttccta	cgggtctctc	tgcatttggg	ctgctgatca	4200
tggtgccata	atgtgtatgg	aaagtgtaac	acattcttac	tggttaaaga	cgactaccag	4260
gtatctaact	tgtttaacat	tga				4283

<210> 56

<211> 6140

<212> DNA

<213> Homo sapiens

<400> 56

gcggccgcag	cctgagccag	ggccccctcc	ctcgtcagga	ccgggggcagc	aagcaggccg	60
ggggcaggtc	cgggcaccca	ccatgcgagg	cgagctctgg	ctcctgggtgc	tggtgctcag	120
ggaggctgcc	cgggcgctga	gccccagcc	cggagcagggt	cacgatgagg	gcccaggctc	180
tggtatgggt	gccaaaggga	ccgtgcgggg	ctggaaccgg	agagcccagag	agagccctgg	240
gcattgtgtc	gagccggaca	ggacccagct	gagccaggac	ctgggtgggg	gcaccctggc	300
catggacacg	ctgccagata	acaggaccag	gggtgggtggag	gacaaccaca	gctattatgt	360
gtcccgtctc	tatggcccca	gcgagcccca	cagccgggaa	ctgtgggtag	atgtggccga	420
ggccaaccgg	agccaagtga	agatccacac	aatactctcc	aacacccacc	ggcaggcttc	480
gagagtggtc	ttgtcctttg	atctcccttt	ctacggggcat	cctctgcggc	agatcaccat	540
agcaactgga	ggcttcacat	tcatggggga	cgtgatccat	cggatgctca	cagctactca	600
gtatgtggcg	cccctgatgg	ccaacttcaa	ccctggctac	tccgacaact	ccacagttgt	660
ttactttgac	aatgggacag	tctttgtggg	tcagtgggac	cacgtttatc	tccaaggctg	720
ggaagacaag	ggcagtttca	ccttcacagg	agctctgcac	catgacggcc	gcatttgtct	780
tgccataaaa	gagatcccta	tgtctgtccc	ggaaatcagc	tccctccagc	atcctgtcaa	840
aaccggccta	tcggatgcct	tcatgattct	caatccatcc	ccggatgtgc	cagaatctcg	900
gcgaaggagc	atctttgaat	accacgcgat	agagctggac	cccagcaagg	tcaccagcat	960
gtcggccgtg	gagttcaccc	cattgcccgc	ctgcctgcag	cataggagct	gtgacgcctg	1020
catgtcctca	gacctgacct	tcaactgcag	ctgggtgccat	gtcctccaga	gatgtccag	1080
tggttttgac	cgctatcgcc	aggagtggat	ggactatggc	tgtgcacagg	aggcagaggg	1140
caggatgtgc	gaggacttcc	aggatgagga	ccacgactca	gcctcccctg	acacttctct	1200
cagcccctat	gatggagacc	tcaccactac	ctcctcctcc	ctcttcacgc	acagccctac	1260
cacagaagat	gacaccaagt	tgaatcccta	tgcaggagga	gacggccttc	agaacaacct	1320
gtcccccaag	acaaagggca	ctcctgtgca	cctgggcacc	atcgtgggca	tcgtgctggc	1380
agtcctctc	gtggcggcca	tcatcctggc	tggaattttac	atcaatggcc	acccacatc	1440
caatgctgcg	ctcttcttca	tcgagcgtag	acctcaccac	tgggcagcca	tgaagtctcg	1500
cagccaccct	gaccattcca	cctatgcgga	gggtggagccc	tcgggcatg	agaaggaggg	1560
cttcatggag	gctgagcagt	gctgagaaca	ccaagtctcc	cctttgaaga	ctttgaggcc	1620
acagaaaaga	cagttaaagc	aaagaagaga	agtgactttt	cctggcctct	cccagcatgc	1680
cctgggctga	gatgagatgg	tggtttatgg	ctccagagct	gctgttcgct	tcgtcagcac	1740
acctcaata	ttgaagaggg	ggccaaaaaa	caaccacatg	gattttttat	aggaacaaca	1800
acctgaatctc	atcctgtttt	gatgcaaggg	ttctcttctg	tgtcttgtaa	ccatgaaaca	1860
gcagaagaac	taacataact	aactccattt	ttgtttaagg	ggcctttacc	tattcctgca	1920
cctaggctag	gataacttta	gagcactgac	ataaaacgca	aaaacaggaa	tcattgccgtt	1980
tgcaaaaacta	actctgggat	taaaggggaa	gcattgaaac	agctaactgt	ttttgttaaa	2040
gatttatagg	aatgaggagg	tttggctatt	gtcacatgac	agactgttag	ccaaggacaa	2100
agaagtctcg	caaacctccc	ctggaccctt	gctgggtgct	agatgtctgc	ggttgtcagc	2160
cccttccttt	ccccgacct	aaacataaaa	gacaaggcaa	agcccgcata	attttaagac	2220
ggttcttttag	gacattagtc	caccatcttc	ttggtttgct	ggctctccga	aataaaagtc	2280
ctttccttgc	tccaactcct	tgtctctcaa	cgtattggct	atgacgcagc	aagcagaatg	2340
aatttggact	cagttacagg	ctgtcaatgg	tctgtctgtg	agcagtctca	gagcctcccc	2400
gacccactag	ctggagatag	ccagatagcc	agatgccctg	ctcctggcca	cctttaagac	2460
ccctgcata	gacacagggt	aactaaagtc	aagattgggg	ctgctgcatt	ccagggtccc	2520
tagactcaca	agctggctct	tgggccagggt	cagtggctca	cgccgtgta	cccagcactt	2580
tggtgggctg	aggcaggcgg	atcacctgaa	gtcagaagtt	tgagaccagc	ctggccaaca	2640
taattaaaat	gtctctacta	aaaatacaaa	gaattagctg	gggtgtggta	cgcttgctcg	2700
tatcccagct	actcaggaag	ctgagacacg	agaatcactt	gaacctggga	ggcagagggt	2760
gcagttagct	cagatagtgc	cactgcactc	cagcctgggt	gacagagcga	gactccgtct	2820
caaaaaaaaa	aaaagaaagc	agaacctcat	ggctatagag	ttggcatttt	agccccagct	2880
tctgtagctc	tgaaagccta	aagaaggtat	tctctccatc	tgtaaacac	agtatagtgg	2940
ctctgacccc	ttggggcatg	ttatcatggg	agggaagtca	aataagagga	gagaaaagaa	3000
ctcaaggggg	aaactgcatt	tttaggcttt	gctctcttac	cttgcccttt	ctactcagaa	3060

```

ccaataaactt ctgcatcaaa acatgtttaca gcctgcatca agggcctttac cccaacctgc 3120
agcccagcct tccctgggtg agcttgctat gcgcagccac atttaccatg tggggctccc 3180
tattctgatg gcctgttcgg tgccgggttt actcactgcc ctgttctgat gtcagtgcct 3240
gtacatacct ccaaaggcag gacttgctcg ataaatattt ttctctctct gaactggatt 3300
taattagcat taaagacaag tcgggtggct agagggtcc ttgagacata cctagcaggg 3360
aactgcagggt ggattctgtt gagaggcaaa gcacctgagt gggtgggaca caggcagctg 3420
gcatggggagg gacttttttt gagacagggt ctactgtgt cggccagggc aaggatgccc 3480
aaagacacca gggtggagag gcacctgcca actacttgct ttccctggag cctgcatgtg 3540
cctgtgggggt ggggaggcgt aggggtctac ggctgcctga gatgggtgtg cacagtgtgt 3600
gaagtacatc cctccttgcc ttgctggact gtcagccagt cgcagggccg gccacaagac 3660
ccatgtctcc atctgggtcat actccatagc taccaagtta acctgctcta aactttggag 3720
aactggatct gtccaataaa cgcttatttg gccaaacctg atggctcgtg cctgtactcc 3780
cagcactttg ggaggctgag gtgggagggt tgcttgagcc caggggtttg agaccagctt 3840
gggcaacaac aacaaaaatg ccagggtgtg tggggtgcac ctgtatccc agctactagg 3900
gaggctgagc caggaggatc acttgagccc gggagggtga ggctgcagtg gggggctata 3960
atcatgccac tgtactccag cctgggtgac agagttagac cctgtctccg aaaaaaaaaa 4020
aaaaaaaaa acggaaaaaag aaatgcttac attgtcaggg atcctgtaga caatcattaa 4080
ctctatgaga tgcttggttc ttttttttg ggagactttg tccaagtgtt ttggcttaag 4140
aaatccatag gcctctcttg gtgacacatc tctagtactt ttgtcataa acaaacaggc 4200
catctgccgc caaatatc cactcccat gccactgaca tccatgggt cagccaggct 4260
tgctttgact gaggcgagg catctggaac ttctctgcc tgcaggggct agcagcagag 4320
gcttcaccgc atcaccaccc ctctctccac tctgacatt ctttccctc agggatccaa 4380
aatggttggc cgagctccca gtgggaaaaac gtgtgctaga gttggggagt gagatgagt 4440
gtgctgtcca tggaatcagg ccacagcagg aactgcccc ctggccattt gagacacaca 4500
cagggtgtaa atgctctgct ggtgggctgt gcttccctca ttcagagagc tctgttacag 4560
cccactgtgt cctttagaag cttgaaagga acccaactct ttgctgact gtcccttttc 4620
ttctcaaat tcagaccctc ctccaccgg caccctccca ctccaccctc agctcttct 4680
tgctgtgtt atcaagcaga gctgaggccc cactgttcca actctgattg tcaactgcat 4740
cttcacaaag gataaaccac ggagcaactg gaaaaccatc agccaagcgt tcggatgagt 4800
ctggttattg gtccacccc gaccagattc ccttacactt aactcactt tttctttggc 4860
aatgacctc atgacatgta taaatgggtg tgactaagaa gaggtgtgta tctaacttt 4920
atttgctgcc attttttact ctggggagaa gcagcccaa ctcatcactg ggaaagaact 4980
ccccctgcaa accagctaaa tttgataatt taaacccct gccctaaaaa cttctcacag 5040
agctggggag ttggtggcaa ctttccaagt caaggtcttg cttagaaagt ccttactac 5100
atggccagggt gcagtggctc acgcctgtag tccagggtac ttgggagcct gaggcaggag 5160
gattgttga gctcaggagt tcaaggctgc agagagctat gatcatccca ctgcatattg 5220
ttaaaaaata attttttaaa tttgtgtgtt ttatcagggt tctcctgtac agtgtatctg 5280
tgtatgtttg tgtgtgtgtt tgtatacagc cttgtttaat gttttgagca ataagatatg 5340
cacacacagg tattttgttg ctaaagagat tggacaaggt ttagctgtg ctcaggcttc 5400
agcttggttt gttaaattga gagataaaca atgacaagag ctgccagcca accacactat 5460
tcaaaaagca aagtgttcac cactaaagct aaccattcat ctggttgag gcaaggctaa 5520
ggctctctct cctctagttc ctggaacaga ctacagatt ggcataagc actgatcagg 5580
ggctgactc agactccctg gccaaagcaa cctacaccag aagagtcatg gtcacagata 5640
tgatgcggcc aatctctgtc tccaaaaacc tacctgaact taatggtaga attcaaagat 5700
ctggggactg agggcaccca gccttctaaa acacaatgta ttcattgtgt tctgtctaac 5760
tctctgcatg gattctcagt gttaataata aaaggaagca ttcttttaca actcctgtct 5820
tgtgcaaaag aaagtgcaaa ggatttgag tggcattccg aagatcacca cacatacctt 5880
ggttctgatg gctgctgaac tccgactctc tcgctgagac atgactgtgg gaacagcctc 5940
cagctatctg ctcatcagag gtgctttcct caacctcctg caccacctcc aagagaaaca 6000
gcctaaaaag aaaccccagc tgtttactta tattggtctg taaatccctg gaagtaaacc 6060
ccatgcattt ttatctactg tctgaggaca tacaataaat ctgagaaagt ctatgctgtc 6120
aaaaaaaaa aaaaaaaaaa

```

<210> 57

<211> 2098

<212> DNA

<213> Homo sapiens

<400> 57

```

gcaggagcac gtggagaggc cgggtagcca cagcggcagc tccagcccg cccggcagcg 60
acatggaaga tatacaaaac aatgcggaac tgaaaagcac tcaggagcag tctgtgcccg 120
cagaaagtgc agcggttttg aatgactaca gtttaacca atctcatgaa atggaaaatg 180

```

tggacagtgg	agaaggccca	gccaatgaag	atgaagacat	aggagatgat	tcaatgaaag	240
tgaagatga	atacagtga	agagatgaga	atgttttaaa	gtcagaaccc	atgggaaatg	300
cagaagagcc	tgaaatccct	tacagctatt	caagagaata	taatgaatat	gaaaacatta	360
agttggagag	acatgtttgtc	tcattcgata	gtagcaggcc	aaccagtggg	aagatgaact	420
gcgatgtgtg	tggattatcc	tgcatcagct	tcaatgtctt	aatggttcat	aagcgaagcc	480
atactgggtga	acgcccattc	cagtgtaatc	agtgtggggc	atcttttact	cagaaaggta	540
acctcctccg	ccacattaaa	ctgcacacag	gggaaaaacc	ttttaagtgt	cacctctgca	600
actatgcatg	ccaaagaaga	gatgcgctca	cggggcatct	taggacacat	tctgtggaga	660
aacctacaa	atgtgagttt	tgtggaagga	gttacaagca	gagaagttcc	cttgaggagc	720
acaaggagcg	ctgccgtaca	tttcttcaga	gcactgaccc	aggggacact	gcaagtgcgg	780
aggcaagaca	catcaaagca	gagatgggaa	gtgaaagagc	tctcgtactg	gacagattag	840
caagcaatgt	ggcaaaacga	aaaagctcaa	tgctcagaa	attcattggg	gagaagcgcc	900
actgctttga	tgtcaactat	aattcaagtt	acatgtatga	gaaagagagt	gagctcatat	960
agaccgcgat	gatggacca	gccatcaata	acgccatcag	ctatcttggc	gccgaagccc	1020
tgtgccctt	ggctccagaca	ccgcctgctc	ccacctcgga	gatggttcca	gttatcagca	1080
gcatgtatcc	catagccctc	accgggctg	agatgtcaaa	cgggtgccct	caagagctgg	1140
aaaggaaaag	catcctcctt	ccagagaaga	gcgtgccttc	tgagagaggg	ctctctccca	1200
acaatagtgg	ccacgactcc	acggacactg	acagcaacca	tgaagaacgc	cagaatcaca	1260
tctatcagca	aaatcacatg	gtcctgtctc	gggcccga	tgggatgcca	cttctgaagg	1320
aggttccccg	ctcttaagaa	ctcctcaagc	ccccgcccat	ctgccaaga	gactctgtca	1380
aagtgatcga	caagggaagg	gaggtgatgg	atgtgtatcg	gtgtgaccac	tgccgcgtcc	1440
tcttctggga	ctatgtgatg	ttcacgattc	acatgggctg	ccacggcttc	cgtgaccctt	1500
tcgagtgtaa	catgtgtgga	gatcgaagcc	atgatcggtg	tgaattctcg	tctcacatag	1560
ccagaggaga	acacagaagc	ctgctgaagt	gaatatctgg	tctcagggat	tgctcctatg	1620
tattcagcat	cgtttctaaa	aacagttgac	ctcgccctaac	agattgctct	caaacatac	1680
tcagttccaa	acttcttttc	ataccatttt	tagctgtgtt	cacaggggta	gcaagacaaa	1740
cactgtcttc	cttcagaaat	tattcgcagg	tctagcatat	tattactttt	gtgaaacctt	1800
tgttttccca	tcagggaactt	gaattttatg	gaatttataa	gccaaaaagg	tatttggtca	1860
ttatcttcta	cagcagtggg	atgagtggtc	ccggagatgt	gctatatgaa	acattctttc	1920
tgagatatat	caaccacacg	tggaagagcc	tttcagtcac	acatgcaaat	ccacaaagag	1980
gaagagctga	ccagctgacc	ttgctgggaa	gcctcaccct	tctgcccttc	acaggctgaa	2040
gggttaagat	ctaactctcc	taactctaat	gacagtctaa	gagtaagtaa	aagaacag	2098

<210> 58

<211> 2947

<212> DNA

<213> Homo sapiens

<400> 58

atgccaatc	ctcctcccc	gccaccccca	cctgggtcctc	ctccacctcc	cacatttcat	60
caggcaaa	cagagcagc	caagctgagt	agagatgagc	agcgggggtcg	aggcgccctc	120
ttacaggaca	tttgcaaagg	gaccaagctg	aagaagtgga	ccaacattaa	tgatcggagt	180
gctcccatcc	tcgagaagcc	gaaaggaagc	agtgggtggct	atggctctgg	aggagctgcc	240
ctgcagccca	agggaggtct	cttccaagga	ggagtgtgga	agcttcgacc	tgtgggagcc	300
aaggatgggt	cagagaacct	agctggtaag	ccagccctgc	aaatccccag	ttctcgagct	360
gctgccccaa	ggcctccagt	atctgccgcc	agcgggctgc	ctcaggatga	tacagacagc	420
agccgggcct	cactcccaga	actgccccgg	atgcagagac	cctctttacc	ggacctctct	480
cggcctaata	ccaccagcag	tacgggcatg	aagcacagct	cctctgcccc	ttccccacca	540
cccccagggc	ggcgtgcca	cgcaccccc	acacctctgc	ctatgcacag	cagcaaagcc	600
ccgcctaca	acagagagaa	acccttgcca	ccgacgcctg	gacaaaggct	tcaccctggt	660
cgagagggag	ctcctgtctc	acccccagtc	aaaccacctc	cttcccctgt	gaatatcaga	720
acaggacca	gtggccaagt	tctggctcct	cctcctccgc	cttaccgcca	gcctcctggg	780
gtccccaatg	gacctcttag	ccccactaat	gagtcagccc	ctgagctgcc	acagagacac	840
aattctttgc	ataggaagac	accagggcct	gtcagaggcc	tagcacctcc	tcacccacc	900
tcggcctccc	catctttact	gagtaaatag	ccacctcccc	cagcccagga	ccctcccagt	960
gggggagcag	ctcctccacc	cccaccacct	gtgatccgaa	atgggtgccag	ggatgctccc	1020
cctccccac	caccataccg	aatgcatggg	tcgaaccccc	cgagccgagg	aaagccccc	1080
cctccaccct	caaggacgcc	agctggggcca	ccccctcctc	ctccaccgcc	cctgaggaat	1140
ggccacagag	attctatcac	cactgtccgg	tctttcttgg	atgattttga	gtcaaagtat	1200
tccttccatc	cagtagaaga	ctttcctgct	ccagaagaat	ataaacactt	tcagaggata	1260
tatcccagca	aaacaaaccg	agctgcccgt	ggagccccc	ctctgccacc	cattctcagg	1320
tgaagcctgg	cttgggtccc	ttcctcagga	aaaggatgga	ccttctcttc	ttctcagatg	1380

gtcccttcca	ttccctgaa	acctgcatga	gagctcctaa	catgtttctc	caatgcaatc	1440
aagccctaga	ctccaaatgt	cctcccagct	cacctccatc	tatgcatctc	atctctggat	1500
ttggtgatca	gactctatat	tgacagtagg	atctcaaacc	ctgcatccat	ccttctctcca	1560
gcaagccctg	ctagccacat	gaggaacaag	tttccgtgtc	ttctgccttc	ctcttgggga	1620
aaggtgcctt	gttgatgatga	attaactcac	tgtaggggca	gggtggagaa	tggtactcct	1680
tccttctcct	gtccactgtg	ggggaagctt	ggcaggata	ttatatttca	tcatttagga	1740
ggctggcatg	accaggactt	atgggtggga	ggggagcatt	tttagtgaag	caagaaagga	1800
gtttgccaaag	aagtgatctg	ttttaaaagt	catatttgga	gaaagggcaa	ggaattgggt	1860
ctgctttatt	tttgggggta	ttttgttttt	gttctcacct	gctgcccccc	cacccaccca	1920
ccccagggat	aaattggata	taaacactaa	ataactaatca	gttgaactta	acatttaata	1980
aaaagaaaag	gtgaaataaa	ctgaagacca	ttttagaact	agtcagttct	ctgcagcaaa	2040
gggaacagga	gccatttgaa	ccctctggga	cccctcacc	cactgcttca	gggtgctagg	2100
ctgagggatg	tttttctctc	cccttaccgc	ccatgccctt	gaaagaaaag	tcactttttg	2160
tggagggcat	cattcattcc	tgattcacia	accccaaaaa	cctctgggtg	gagataggaa	2220
gatagggcgt	gggcctgggc	cttaacctca	atcttgtgtc	tgccctcagtc	ttttctgact	2280
ggccctgaag	ttgtcagtg	ctctttctgt	ccttcagccc	ctggaagggtg	ctccaggata	2340
acaaagaagg	gcaggttgaa	gcccctcatg	gaaggagctg	gctttgtggg	gctgcaaagg	2400
acttttaagt	cctgcctgta	ctgaagttca	cagccacact	gactgagcag	actcttctctg	2460
ttcctttctc	taccaccctt	gccttcccag	gactgcacgg	tttaacacag	cagagtacag	2520
aaggtgaaag	aagtgagcag	aggcttatga	agatattcag	atactcttct	atgccaggaa	2580
gcacaaagac	tttgttgaga	tttgccctcag	ttcagtagat	cttccttggc	agccagccat	2640
agggtgtttc	tttgtcttcc	gggtcctaaa	gagcacagag	aaaatggagg	tccccagctc	2700
aggtaggaag	ctgattggat	gaggacttct	ttttttccga	cagcaggatg	gggctcttgg	2760
gctccacaca	ccagatgctt	tggttttcta	caactgttgc	tatgtgtaga	gggtgctcag	2820
agcgtggcat	gagagcaagg	agaccatggc	tactctttga	aatggatggg	gaaaattagc	2880
ttaaaaattt	aatcacgaga	ttgcgccact	gcactccagc	ctgggcgaca	gagccagact	2940
ccgtctc						2947

<210> 59

<211> 784

<212> DNA

<213> Homo sapiens

<400> 59

gagcgggtgc	gcagtgaagg	ctagaccocg	tttactggaa	ttgctctggc	gatcgagggg	60
tcctagtaca	ccgcaatcat	gtctattatg	tcctataacg	gaggggcccgt	catggccatg	120
aaggggaaga	actgtgtggc	catcgctgca	gacaggcgct	tcgggatcca	ggcccagatg	180
gtgaccacgg	acttccagaa	gatctttccc	atgggtgacc	ggctgtacat	cgggtctggcc	240
gggctcgcca	ctgacgtcca	gacagttgcc	cagcgccctca	agttccggct	gaacctgtat	300
gagttgaagg	aaggtcggca	gatcaaacct	tataccctca	tgagcatggt	ggccaacctc	360
ttgtatgaga	aacggtttgg	cccttactac	actgagccag	tcattgcccg	gttggacccg	420
aagaccttta	agcccttcat	ttgctctcta	gacctcatcg	gctgccccat	ggtgactgat	480
gactttgtgg	tcagtggcac	ctgcgccgaa	caaatgtacg	gaatgtgtga	gtccctctgg	540
gagcccaaca	tggatccgga	tcacctgttt	gaaaccatct	cccaagccat	gctgaatgct	600
gtggaccggg	atgcagtgtc	aggcatggga	gtcattgtcc	acatcatcga	gaaggacaaa	660
atcaccacca	ggacactgaa	ggcccgaatg	gactaacctt	gttcccagag	cccacttttt	720
tttctttttt	tgaataaaaa	tagcctgtct	ttcaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	780
aaaa						784

<210> 60

<211> 3033

<212> DNA

<213> Homo sapiens

<400> 60

atactcctaa	gtctctcccc	cggcggcgag	ccagggagaa	aggatggccg	gcctggcggc	60
gcgggttggtc	ctgctagctg	gggcagcggc	gctggcgagc	ggctcccagg	gcgaccgtga	120
gccggtgtac	cgcgactgcy	tactgcagtg	cgaagagcag	aactgctctg	ggggcgctct	180

gaatcacttc	cgctcccgcc	agccaatcta	catgagtcta	gcaggctgga	cctgtcggga	240
cgactgtaag	tatgagtgt	tgtgggtcac	cggtgggctc	tacctccagg	aaggtcacaa	300
agtgcctcag	ttccatggca	agtggccctt	ctcccggttc	ctgttctttc	aagagccggc	360
atcgcccggtg	gcctcggttc	tcaatggcct	ggccagccctg	gtgatgctct	gccgctaccg	420
caccttcgtg	ccagcctcct	cccccatgta	ccacacctgt	gtggccttcg	cctgggtgtc	480
cctcaatgca	tgggtctggg	ccacagctct	ccacaccagg	gacactgacc	tcacagagaa	540
aatggactac	ttctgtgcct	ccactgtcat	cctacactca	atctacctgt	gctgcgtcag	600
gtgagcctgc	ctgggtggct	gcaggggcaa	aatcgaacco	tgggggcaga	aaggggtcac	660
ccagccttcc	cctggggggc	ttcttcaacta	gtctcccaac	acctacgccc	cccaaccccc	720
aacacatcag	ctgtcctggg	tgaggactct	ggggtaggac	tggggggcct	ggctcctgac	780
aaggagctgt	agcacttgct	gcccagctgt	ggcctgtttg	gtggggagag	gggtagtgc	840
ttcaggggcc	atgcaccaat	ggtgggggga	ggagatgctt	cagggaaatgc	tgctctgggg	900
atggggccacc	tgccctctga	gcaaccctgg	acggtggggc	aggaccgtgg	ggctgcagca	960
cccagctgtg	gtcagtgcct	tccgggctct	cctgctgctc	atgctgaccg	tgacgctctc	1020
cctacctgagc	ctcatccgct	tgcactatgg	ctacaacctg	gtggccaacg	tggtatttgg	1080
cctgggtcaac	gtgggtgtgg	ggctggcctg	gtgctgtgtg	aaccagcggc	ggctgcctca	1140
cggtgcgaag	tgctgtgtgg	tggtcttgc	gctgcagggg	ctgtccctgc	tcgagctgct	1200
tgacttccca	ccgctcttct	gggtcctgga	tgcccatgcc	atctggcaca	tcagcaccat	1260
cctgtgccac	gtcctctttt	tcagctttct	ggaagatgac	agcctgtacc	tgctgaagga	1320
atcagaggac	aagttcaagc	tggactgaag	accttggagc	gagctgtccc	cagtggggat	1380
cctgcccccg	ccctgctggc	ctcccttctc	ccctcaaccc	ttgagatgat	ttctctttt	1440
caacttcttg	aacttggaca	tgaaggatgt	ggggccagaa	tcagtgggcc	agcccacccc	1500
ctgttggccc	tcaccagcct	tggagtctgt	tctagggaag	gcctcccagc	atctgggact	1560
cgagagtggg	cagccccctc	acctcctgga	gctgaactgg	ggtggaactg	agtgtgttct	1620
tagctctacc	gggaggacag	ctgcctgttt	cctccccacc	agcctcctcc	ccacatcccc	1680
agctgcctgg	ctgggtcctg	aagccctctg	tctacctggg	agaccagggg	ccacaggcct	1740
tagggataca	gggggtcccc	ttctgttacc	acccccacc	ctcctccagg	acaccactag	1800
gtgggtgctg	atgcttgttc	tttggccagc	caaggttcac	ggcgattctc	cccatgggat	1860
cttgaggggac	caagctgctg	ggattgggaa	ggagtttcac	cctgaccgtt	gccctagcca	1920
ggttcccagg	aggcctcacc	atactccctt	tcagggccag	ggctccagca	agcccagggc	1980
aaggatcctg	tgctgctgtc	tggttgagag	cctgccaccg	tgtgtcggga	gtgtgggcca	2040
ggctgagtgc	ataggtgaca	gggccgtgag	catgggcctg	ggtgtgtgtg	agctcaggcc	2100
taggtgcgca	gtgtggagac	gggtgttgtc	ggggaagagg	tgtggcttca	aagtgtgtgt	2160
gtgcaggggg	tgggtgtgtt	agcgtgggtt	aggggaacgt	gtgtgcgcgt	gctggtgggc	2220
atgtgagatg	agtgaactgc	ggtgaatgtg	tccacagttg	agagggttga	gcaggatgag	2280
ggaatcctgt	caccatcaat	aatcacttgt	ggagcgccag	ctctgcccaa	gacgccacct	2340
gggcggacag	ccaggagctc	tccatggcca	ggctgcctgt	gtgcatgttc	cctgtctggg	2400
gcccctttgc	ccgcctcctg	caaacctcac	agggtcccca	cacaacagtg	ccctccagaa	2460
gcagccccctc	ggaggcagag	gaaggaaaat	ggggatggct	ggggctctct	ccatcctcct	2520
tttctccttg	ccttcgcatg	gctggccttc	ccctccaaaa	cctccattcc	cctgttgcca	2580
gcccctttgc	catagcctga	ttttggggag	gaggaagggg	cgatttgagg	gagaagggga	2640
gaaagcttat	ggctgggtct	ggtttcttcc	cttcccagag	ggtcttactg	ttccaggggtg	2700
gccccagggc	aggcaggggc	cacactatgc	ctgcgccctg	gtaaagggtga	ccctgccat	2760
ttaccagcag	ccctggcatg	ttcctgcccc	acaggaatag	aatggaggga	gctccagaaa	2820
ctttccatcc	caaaggcagt	ctccgtgggt	gaagcagact	ggatttttgc	tctgccccctg	2880
acccttctgc	cctctttgag	ggaggggagc	tatgctagga	ctccaacctc	agggactcgg	2940
gtggcctgcg	ctagcttctt	ttgatactga	aaacttttaa	ggtgggaggg	tggcaaggga	3000
tgtgcttaat	aaatcaattc	caagcctcac	ctg			3033

<210> 61

<211> 1174

<212> DNA

<213> Homo sapiens

<400> 61

aagctcctcc	cccggcggcg	agccaggggag	aaaggatggc	cggcctggcg	gcgcgggttg	60
tctgtctagg	tgggggcagcg	gcgctggcga	gcggctccca	gggocgaccgt	gagccgggtg	120
accgcgactg	cgtactgcag	tgcaagagc	agaactgctc	tgggggcgct	ctgaatcact	180
tccgctcccc	ccagccaatc	tacatgagtc	tagcaggctg	gacctgtcgg	gacgactgta	240
agtatgagtg	tatgtgggtc	accgttgggc	tctacctcca	ggaaggctac	aaagtgcctc	300
agttccatgg	caagtggccc	ttctccccgt	tctgtttctt	tcaagagccg	gcacggccg	360
tggcctcggt	tctcaatggc	ctggccagcc	tggtgatgct	ctgccgctac	cgcaccttcg	420

tgcagcctc	ctcccccatg	taccacacct	gtgtggcctt	cgcttgggtg	tccctcaatg	480
catggttctg	gtccacagtc	ttccacacca	gggacactga	cctcacagag	aaaatggact	540
acttctgtgc	ctccactgtc	atcctacact	caatctacct	gtgctgcgtc	aggaccgtgg	600
ggctgcagca	cccagctgtg	gtcagtgcc	tccgggtctt	cctgctgtc	atgctgaccg	660
tgcacgtctc	ctacctgagc	ctcatccgct	tgcactatgg	ctacaacctg	gtggccaacg	720
tggctattgg	cctggtaaac	gtgggtgtgt	ggctggcctg	gtgcctgtgg	aaccagcggc	780
ggctgcctca	cgtgcgcaag	tgcgtgtgtg	tggctcttgc	gctgcagggg	ctgtccctgc	840
tgcagctgct	tgacttccca	ccgctcttct	gggtccctga	tgcccatgcc	atctggcaca	900
tcagcaccat	ccctgtccac	gtcctctttt	tcagctttct	ggaagatgac	agcctgtacc	960
tgctgaagga	atcagaggac	aagttcaagc	tgggtgaagc	agactggatt	tttgcctctg	1020
ccctgacccc	ttgtccctct	ttgagggagg	ggagctatgc	taggactcca	acctcagggg	1080
ctcgggtggc	ctgcgctagc	ttcttttgat	actgaaaact	tttaagggtg	gaggggtggc	1140
agggatgtgc	ttaataaatc	aattccaagc	ctca			1174
<210>	62					

<211> 3167

<212> DNA

<213> Homo sapiens

<400>	62					
aagctcctcc	ccccggcgcg	agccaggagg	aaaggatggc	cgccctggcg	gcgcgggttg	60
tactgtctagc	tggggcagcg	gcgctggcga	gcggctccca	gggcgaccgt	gagccggtgt	120
accgcgactg	cgtactgcag	tgcgaagagc	agaactgctc	tgggggcgct	ctgaatcact	180
tccgctcccg	ccagccaatc	tacatgagtc	tagcaggctg	gacctgtcgg	gacgactgta	240
agtatgagtg	tatgtgggtc	accgttgggc	tctacctcca	ggaaggtcac	aaagtgcctc	300
agttccatgg	caagtggccc	ttctcccggc	tccgttctct	tcaagagccg	gcatcgggcg	360
tggctctggt	tctcaatggc	ctggccagcc	tgggtatgct	ctgccgctac	cgcaccttcg	420
tgcagcctc	ctcccccatg	taccacacct	gtgtggcctt	cgcttggatg	agaaaactga	480
ggcacagcaa	ggctaaataa	cttgcccaag	gacacacagg	aatgcagag	ccaggaactg	540
aaccctggca	gtctggctgt	agggcttgca	ttcttaatga	taccactacc	tcccaaatct	600
gaggaaaggg	tgtccctcaa	tgcattggtc	tgggtccacag	tcttccacac	cagggacact	660
gacctcacag	agaaaatgga	ctacttctgt	gcctccactg	tcatactaca	ctcaatctac	720
ctgtgctgcg	tcagggtgagc	ctgcctgggt	ggctgcaggg	gcaaaatcga	accctggggg	780
cagaaagggg	tcacccagcc	ttcccctggg	ggccttcttc	actagtctcc	caacacctac	840
gccccccaac	ccccaacaca	tcagctgtcc	tgggtgagga	ctctggggta	ggactggggg	900
ccttgggtcc	tgacaaggag	ctgtagcact	tgttggccag	ctgtggcctg	tttgggtggg	960
agagggttag	tgacttcagg	ggccatgcac	caatgttggg	gggaggagat	gcttcaggga	1020
atgctgctct	ggggatgggc	cacctgccct	ctgagcaacc	ctggacgggtg	gggcaggacc	1080
gtggggctgc	agcaccagc	tgtggtcagt	gccttccggg	ctctcctgct	gctcatgctg	1140
accgtgcacg	tctcctacct	gagcctcatc	cgcttcgact	atggctacaa	cctggtggcc	1200
aacgtggcta	ttggcctggc	caacgtgggt	tgggtggctg	cctggtgcct	gtggaaccag	1260
cggcggtcgc	ctcacgtgcg	caagtgcgtg	gtggtgtctc	tgtgtgctga	gggggtgtcc	1320
ctgctcgagc	tgcttgactt	cccaccgtc	ttctgggtcc	tggatgcccc	tgccatctgg	1380
cacatcagca	ccatccctgt	ccacgtcctc	tttttcagct	ttctggaaga	tgacagcctg	1440
tacctgctga	aggaatcaga	ggacaagtcc	aagctggact	gaagaccttg	gagcaggtct	1500
gccccagtg	ggatcctgcc	cccgccctgc	tggcctccct	tctccctcca	acccttgaga	1560
tgattttctc	ttttcaactt	cttgaacttg	gacatgaagg	atgtgggccc	agaatcatgt	1620
ggccagccca	ccccctgttg	gcccacacca	gccttggagt	ctgttctagg	gaaggcctcc	1680
cagcatctgg	gactcgagag	tgggcagccc	ctctacctcc	tggagctgaa	ctgggggtgga	1740
actgagtgtg	ttcttagctc	taccgggagg	acagctgcct	gtttcctccc	caccagcctc	1800
ctccccacat	ccccagctgc	ctggctgggt	cctgaagccc	tctgtctacc	tgggagacca	1860
gggaccacag	gccttaggga	tacaggggtg	cccttctgt	taccaccccc	cacctcctc	1920
caggacacca	ctaggtgggt	ctggatgctt	gttctttggc	cagccaaggt	tcacggcgat	1980
tctccccatg	ggatcttgag	ggaccaagct	gctgggattg	ggaaggagtt	tcaccctgac	2040
cgttgcccta	gccaggttcc	caggaggcct	caccatactc	cctttcaggg	ccagggtctc	2100
agcaagccca	gggcaaggat	cctgtgctgc	tgttgggttg	agagcctgcc	accgtgtgtc	2160
gggagtgtgg	gccaggctga	gtgcatagtg	gacagggccg	tgagcatggg	cctgggtgtg	2220
tgtgagctca	ggcctaggtg	cgcagtgtgg	agacgggtgt	tgtcggggaa	gaggtgtggc	2280
ttcaaagtgt	gtgtgtgcag	gggggtgggtg	tgttagcgtg	ggttagggga	acgtgtgtgc	2340
gcgtgctgg	gggcatgtga	gatgagtgtg	tgccgggtgaa	tgtgtccaca	gttgagaggt	2400
tggagcagga	tgagggaatc	ctgtcaccat	caataatcac	ttgtggagcg	ccagctctgc	2460
ccaagacgcc	acctggggcg	acagccaggga	gctctccatg	gccaggctgc	ctgtgtgcat	2520

```

gttccctgtc tgggtgcccct ttgcccgcct cctgcaaacc tcacagggtc cccacacaac 2580
agtgccctcc agaagcagcc cctcggaggg agaggaagga aaatggggat ggctggggct 2640
ctctccatcc tctttttctc cttgccttcg catggctggc cttcccctcc aaaacctcca 2700
ttcccctgct gccagcccct ttgccatagc ctgatttttg ggaggaggaa ggggcgattt 2760
gagggagaag gggagaaaag ttatggctgg gtctggtttc ttcccctccc agagggctct 2820
actgttccag ggtggcccga gggcaggcag gggccacact atgcctgcgc cctggtaaag 2880
gtgacccctg ccattttacca gcagccctgg catgttcctg ccccacagga atagaatgga 2940
gggagctcca gaaactttcc atcccaaagg cagtctccgt ggttgaagca gactggattt 3000
ttgctctgcc cctgaccctt tgtccctctt tgagggaggg gagctatgct aggactccaa 3060
cctcagggac tcgggtggcc tgcgctagct tcttttgata ctgaaaactt ttaaggtggg 3120
aggggtggca gggatgtgct taataaatca attccaagcc tcacctg 3167
<210> 63

```

<211> 2733

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (2694)..(2694)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (2724)..(2724)

<223> n=a, c, g or t

<400> 63

```

agggagaaaag gatggccggc ctggcggcgc ggttggctct gctagctggg gcagcggcgc 60
tgggcagcgg ctcccagggc gaccgtgagc cgggtgtaccg cgactgcgta ctgcagtgcg 120
aagagcagaa ctgctctggg ggcgctctga atcacttcgg ctcccgccag ccaatctaca 180
tgagtctagc aggctggacc tgtcgggacg actgtaagta tgagtgtatg tgggtcaccg 240
ttgggtctta cctccaggaa ggtcacaagg tgcctcagtt ccatggcaag tggcccttct 300
cccggttcct gttctttcaa gagccggcat cggcctgggc ctcgttttctc aatggcctgg 360
ccagcctggg gatgctctgc cgctaccgca ccttcgtgcc agcctcctcc cccatgtacc 420
acacctgtgt ggccttcgcc tgggtgtccc tcaatgcata gttctggtcc acagtcttcc 480
acaccaggga cactgaccta cagagaaaat ggactacttc tgtgcctcct gtatcctaca 540
ctcaatctac ctgtgctgcg tcaggaccgt ggggctgcag caccagctg tgggtcaagtg 600
ccttcggggc tctcctgctg ctcatgctga ccgtgcacgt ctctacctg agcctcatcc 660
gcttcgacta tggctacaac ctgggtggcca acgtggctat tggcctggtc aacgtgggtg 720
gggtggctggc ctggtgcctg tgggaaccagc ggcggctgcc tcacgtgcgc aagtgcgtgg 780
tgggtgtcct gctgctgcag gggctgtccc tgcctgagct gcttgacttc ccaccgtctc 840
tctgggtcct ggatgcccat gccatctggc acatcagcac catccctgtc cacgtcctct 900
ttttcagctt tctggaagat gacagcctgt acctgctgaa ggaatcagag gacaagttca 960
agctggactg agaccttgga gcgaagtctg cccagtgagg gatcctgccc ccgccctgct 1020
ggcctccctt ctcccctcaa cccttgagat gattttctct tttcaacttc ttgaacttgg 1080
acatgaagga tgtgggcccga gaatcatgtg gccagcccac cccctgttgg cccctcaccg 1140
ccttgagtc tgttctaggg aaggcctccc agcatctggg actcgagagt gggcagcccc 1200
tctacctcct ggactgaact ggggtggaac tgagtgtgtt cttagctcta ccgggaggac 1260
agctgcctgt ttccctccca ccagcctcct cccacatcc ccagctgcct ggctgggtcc 1320
tgaagccctt tgtctacctg ggagaccagg gtaccacagg ccttagggat acaggggggtc 1380
cccttctggt accaccctcc accctcctcc aggacccac taggtggtgc tggatgcttg 1440
ttctttggcc agccaagggt caccggcatt ctccccatgg gatcctgagg gaccaagctg 1500
ctgggattgg gaaggagttt caccctgacc gttgccttag ccaggttccc aggaggcctc 1560

```

accatactcc	ctttcagggc	cagggctcca	gcaagcccag	ggcaaggatc	ctgtgctgct	1620
gtctggttga	gagcctgcc	ccgtgtgtcg	ggagtgtggg	ccaggctgag	tgcataagggtg	1680
acagggccgt	gagcatgggc	ctgggtgtgt	gtgagctcag	gcctagggtgc	gcagtgtgga	1740
gacgggtgtt	gtcggggaag	aggtgtggct	tcaaagtgtg	tgtgtgcagg	gggtgggtgt	1800
gttagcgtgg	gttaggggaa	cgtgtgtgcg	cgtgctgggtg	ggcatgtgag	atgagtgaact	1860
gccggtgaat	gtgtccacag	ttgagagggtt	ggagcaggat	gagggaaatcc	tgtcaccatc	1920
aataatcact	tgtggagcgc	cagctctgcc	caagacgcca	cctgggcgga	cagccaggag	1980
ctctccatgg	ccaggctgcc	tgtgtgcatg	ttccctgtct	ggtgccccctt	tgccccgcctc	2040
ctgcaaacct	cacagggtcc	ccacacaaca	gtgccctcca	gaagcagccc	ctcggaggga	2100
gaggaaggaa	aatggggatg	gctggggctc	tctccatcct	ccttttctcc	ttgccttcgc	2160
atggctggcc	ttcccctcca	aaacctccat	tcccctgctg	ccagccccctt	tgccatagcc	2220
tgattttggg	gaggaggaag	gggcatgttg	agggagaagg	ggagaaagct	tatggctggg	2280
tctggtttct	tcccttccca	gagggcttta	ctgttccagg	gtggccccag	gcagcagggc	2340
cacactatgc	ctgcgccctg	gtaaagggtga	cccctgccat	ttaccagcag	ccctggcatg	2400
ttcctgcccc	acaggaatag	aatggaggga	gctccagaaa	ctttccatcc	caaaggcagt	2460
ctccgtgggt	gaagcagact	ggatttttgc	tctgccctg	acccttgtc	cctctttgag	2520
ggaggggagc	tatgctagga	ctccaacctc	agggactcgg	gtggcctgcg	ctagcttctt	2580
ttgatactga	aaacttttaa	ggtgggaggg	tggcaaggga	tgtgcttaag	cggccgcgaa	2640
ttcaaaaagc	ttctcgagag	tactttctaga	gcggccgcgg	gcccatcgat	tttncacccc	2700
gggtggggta	cccaggtaag	tgtnccccat	atc			2733

<210> 64

<211> 2546

<212> DNA

<213> Homo sapiens

<400> 64

aaagctcctcc	ccccggcgcg	agccaggag	aaaggatggc	cggcctggcg	gcgcgggttg	60
tccctgctagc	tggggagcgc	gcgctggcga	gcggctccca	gggagaccgt	gagccgggtgt	120
accgcgactg	cgtactgcag	tgccaagagc	agaactgctc	tgggggcgct	ctgaatcact	180
tccgctcccc	ccagccaatc	tacatgagtc	tagcaggctg	gacctgtcgg	gacgactgta	240
agtatgagtg	tatgtgggtc	accgttgggc	tctacctcca	ggaaggtcac	aaagtgcctc	300
agttccatgg	caagtggccc	ttctcccggg	tccgtttctt	tcaagagccg	gcacggcccg	360
tgccctcggt	tctcaatggc	ctggccagcc	tggtgatgct	ctgccgctac	cgcaaccttcg	420
tgccagcctc	ctcccccatg	taccacacct	gtgtggcctt	cgcctgggtg	tccctcaatg	480
catggttctg	gtccacagtc	ttccacacca	gggacactga	cctcacagag	aaaatggact	540
acttctgtgc	ctccactgtc	atcctacact	caatctacct	gtgctgcgtc	aggcctgggtc	600
aacgtgggtg	ggtggctggc	ctggtgcctg	tggaaccagc	ggcggctgcc	tcacgtgcgc	660
aagtgcgtgg	tggtgggtctt	gctgctgcag	gggctgtccc	tgctcgagct	gcttgacttc	720
ccaccgctct	tctgggtcct	ggatgcccct	gccatctggc	acatcagcac	catccctgtc	780
cacgtcctct	ttttcagctt	tctggaagat	gacagcctgt	acctgctgaa	ggaatcagag	840
gacaagtcca	agctggactg	aagaccttgg	agcagctctg	ccccagtggtg	gatcctgccc	900
ccgccctgct	ggcctccctt	ctccccca	cccttgagat	gatttttctt	tttcaacttc	960
ttgaacttgg	acatgaagga	tgtgggcccc	gaatcatgtg	gccagcccac	cccctgttgg	1020
ccctcaccag	ccttgaggatc	tgttctaggg	aaggcctccc	agcatctggg	actcgagagt	1080
gggcagcccc	tctacctcct	ggagctgaac	tggggtggaa	ctgagtgtgt	tcttagctct	1140
accgggagga	cagctgcctg	tttccctccc	accagcctcc	tccccacatc	cccagctgcc	1200
tggtctgggtc	ctgaagccct	ctgtctacct	gggagaccag	ggaccacagg	ccttagggat	1260
acaggggggtc	cccttctgtt	accaccccc	accctcctcc	aggacaccac	taggtgggtgc	1320
tggtatgctt	ttctttggcc	agccaagggtt	cacggcgatt	ctccccatgg	gatccttgagg	1380
gaccaagctg	ctgggatttg	gaaggagtgt	caccctgacc	gttgccctag	ccaggttccc	1440
aggaggcctc	accatactcc	ctttcagggc	cagggctcca	gcaagcccag	ggcaaggatc	1500
ctgtgctgct	gtctggttga	gagcctgcc	ccgtgtgtcg	ggagtgtggg	ccaggctgag	1560
tgcatagggtg	acagggccgt	gagcatgggc	ctgggtgtgt	gtgagctcag	gcctagggtgc	1620
gcagtgtgga	gacgggtgtt	gtcggggaag	aggtgtggct	tcaaagtgtg	tgtgtgcagg	1680
gggtgggtgt	gttagcgtgg	gttaggggaa	cgtgtgtgcg	cgtgctgggtg	ggcatgtgag	1740
atgagtgaat	gccggtgaat	gtgtccacag	ttgagagggtt	ggagcaggat	gagggaaatcc	1800
tgtcaccatc	aataatcact	tgtggagcgc	cagctctgcc	caagacgcca	cctgggcgga	1860
cagccaggag	ctctccatgg	ccaggctgcc	tgtgtgcatg	ttccctgtct	ggtgccccctt	1920
tgccccgcctc	ctgcaaacct	cacagggtcc	ccacacaaca	gtgccctcca	gaagcagccc	1980
ctcggaggga	gaggaaggaa	aatggggatg	gctggggctc	tctccatcct	ccttttctcc	2040
ttgccttcgc	atggctggcc	ttcccctcca	aaacctccat	tcccctgctg	ccagccccctt	2100

tgccatagcc	tgatttttggg	gaggaggaag	gggcgatttg	agggagaagg	ggagaaagct	2160
tatggctggg	tctggtttct	tcccttccca	gagggtctta	ctgttccagg	gtggccccag	2220
ggcaggcagg	ggccacacta	tgccctgcgc	ctggtaaagg	tgacccctgc	catttaccag	2280
cagccctggc	atgttccctgc	cccacaggaa	tagaatggag	ggagctccag	aaactttcca	2340
tcccaaaggc	agtctccgtg	gttgaagcag	actggatttt	tgctctgccc	ctgacccctt	2400
gtccctcttt	gagggagggg	agctatgcta	ggactccaac	ctcagggact	cgggtggcct	2460
gcgctagctt	cttttgatac	tgaaaacttt	taaggtggga	gggtggcaag	ggatgtgctt	2520
aataaatcaa	ttccaagcct	cacctg				2546

<210> 65

<211> 2683

<212> DNA

<213> Homo sapiens

<400> 65

aagctcctcc	cccggcggcg	agccaggagg	aaaggatggc	cggcctggcg	gcgcgggttg	60
tcctgctagc	tggggcagcg	gcgctggcga	gcggctccca	gggcgaccgt	gagccggtgt	120
accgcgactg	cgtactgcag	tgccaagagc	agaactgtct	tgggggcgct	ctgaatcact	180
tccgctcccc	ccagccaatc	tacatgagtc	tagcaggctg	gacctgtcgg	gacgactgta	240
agtatgagtg	tatgtgggtc	accgttgggc	tctacctcca	ggaaggtcac	aaagtgcctc	300
agttccactg	caagtggccc	ttctcccgtt	tccgtttctt	tcaagagccg	gcacccggcg	360
tggcctcggt	tctcaatggc	ctggccagcc	tggtgatgct	ctgccgctac	cgcaccttcg	420
tgccagcctc	ctcccccatg	taccacacct	gtgtggcctt	cgcttgggtg	tccttcaatg	480
catgggttctg	gtccacagtc	ttccacacca	gggacactga	cctcacagag	aaaatggact	540
acttctgtgc	ctccactgtc	atcctacact	caatctacct	gtgctgcgtc	aggaccgtgg	600
ggctgcagca	cccagctgtg	gtcagtgcc	tccgggctct	cctgctgctc	atgctgaccg	660
tgcaogtctc	ctacctgagc	ctcatccgct	tcgactatgg	ctacaacctg	gtggccaacg	720
tggtatttgg	cctggtcaac	gtggtgtggt	ggctggcctg	gtgcctgtgg	aaccagcggc	780
ggctgcctca	cgtgcgcaag	tgctgtgtgg	tggtcttgc	gctgcagggg	ctgtccctgc	840
tcgagctgct	tgacttccca	ccgctcttct	gggtcctgga	tgcccatgcc	atctggcaca	900
tcagcaccat	ccctgtccac	gtcctctttt	tcagctttct	ggaagatgac	agcctgtacc	960
tgctgaagga	atcagaggac	aagttcaagc	tggactgaag	accttggagc	gagtctgccc	1020
cagtggggat	cctgcccccg	ccctgctggc	ctcccttctc	ccctcaacct	ttgagatgat	1080
tttctctttt	caacttcttg	aacttggaca	tgaaggatgt	gggcccagaa	tcattgtggc	1140
agcccccccc	ctgttggccc	tcaccagcct	tggagtctgt	tctagggaag	gcctcccagc	1200
atctgggact	cgagagtggg	cagccctctc	acctcctgga	gctgaactgg	ggtggaactg	1260
agtgtgttct	tagctctacc	gggaggacag	ctgcctgttt	cctccccacc	agcctcctcc	1320
ccacatcccc	agctgcctgg	ctgggtcctg	aagccctctg	tctacctggg	agaccaggga	1380
ccacaggcct	tagggataca	gggggtcccc	ttctgttacc	acccccccacc	ctcctccagg	1440
acaccactag	gtggtgctgg	atgcttgttc	tttggccagc	caagggtcac	ggcgattctc	1500
cccctgggat	cttgagggac	caagctgctg	ggagtgggaa	ggagtgtcac	cctgaccgtt	1560
gccctagcca	ggttcccagg	aggcctcacc	atactccctt	tcaggggccag	ggctccagca	1620
agcccagggc	aaggatcctg	tgctgctgtc	tggttgagag	cctgccaccg	tgtgtcggga	1680
gtgtggggca	ggctgagtg	ataggtgaca	gggcccgtgag	catgggcctg	ggtgtgtgtg	1740
agctcaggcc	taggtgcgca	gtgtggagac	gggtgttgtc	ggggaagagg	tgtggcttca	1800
aagtgtgtgt	gtgcaggggg	tgggtgtgtt	agcgtggggt	aggggaacgt	gtgtgcgcgt	1860
gctggtgggc	atgtgagatg	agtgcactgc	gggtgaatgtg	tccacagttg	agaggttgga	1920
gcaggatgag	ggaatcctgt	caccatcaat	aatcacttgt	ggagcgccag	ctctgcccaa	1980
gacgccacct	gggcggacag	ccaggagctc	tccatggcca	ggctgcctgt	gtgcattgtc	2040
cctgtctggt	gcccccttgc	ccgcctcctg	caaacctcac	agggtcccca	cacaacagtg	2100
ccctccagaa	gcagcccctc	ggaggcagag	gaaggaaaaa	ggggatggct	ggggtctctc	2160
ccatcctcct	tttctccttg	ccttcgcctg	gctggccttc	ccctccaaaa	cctccattcc	2220
cctgctgcca	gcccccttgc	catagcctga	ttttggggag	gaggaagggg	cgatttgagg	2280
gagaagggga	gaaagcttat	ggctgggtct	ggtttcttcc	cttcccagag	ggtcttactg	2340
ttccagggtg	gccccagggc	aggcaggggc	cacactatgc	ctgcgccttg	gtaaaaggta	2400
ccctcccat	ttaccagcag	cctggccatg	ttcctgcccc	acaggaatag	aatggaggga	2460
gctccagaaa	ctttccatcc	caaaggcagt	ctccgtgggt	gaagcagact	ggatttttgc	2520
tctgcccctg	acccttctgc	cctctttgag	ggaggggagc	tatgctagga	ctccaacctc	2580
agggactcgg	gtggcctg	ctagcttctt	ttgatactga	aaacttttaa	ggtgggaggg	2640
tggcaaggga	tgtgcttaat	aaatcaattc	caagcctcac	ctg		2683

<210> 66

<211> 2341

<212> DNA

<213> Homo sapiens

<400> 66

aagctcctcc	cccggcggcg	agccagggag	aaaggatggc	cggcctggcg	gcgcggttgg	60
tcctgctagc	tggggcagcg	gcgctggcga	gcggctccca	gggcgaccgt	gagccggtgt	120
accgcgactg	cgtactgcag	tgcaagagc	agaactgctc	tggggcgct	ctgaatcact	180
tccgctcccc	ccagccaatc	tacatgagtc	tagcaggctg	gacctgtcgg	gacgactgta	240
agtatgagtg	tatgtgggtc	accgttgggc	tctacctcca	ggaaggtcac	aaagtgcctc	300
agttccatgg	caagtggccc	ttctcccggg	tcctgttctt	tcaagagccg	gcacgcggcg	360
tggcctcggt	tctcaatggc	ctggccagcc	tggtgatgct	ctgccgctac	cgcaccttcg	420
tgccagcctc	ctcccccatg	taccacacct	gtgtggcctt	cgcttgggtg	tccttcaatg	480
catggttctg	gtccacagtc	ttccacacca	gggacactga	cctcacagag	aaaatggact	540
acttctgtgc	ctccactgtc	atcctacact	caatctacct	gtgtgtcgct	agcttcttgg	600
aagatgacag	cctgtacctg	ctgaaggaat	cagaggacaa	gttcaagctg	gactgaagac	660
cttggagcga	gtctgcccc	gtggggatcc	tgcccccgcc	ctgctggcct	cccttctccc	720
ctcaaccctt	gagatgattt	tctcttttca	acttcttgaa	cttggacatg	aaggatgtgg	780
gcccagaatc	atgtggccag	cccaccccct	gttggccctc	accagccttg	gagtctgttc	840
tagggaaggc	ctcccagcat	ctgggactcg	agagtgggca	gccccctac	ctcctggagc	900
tgaactgggg	tggaaactgag	tgtgttctta	gctctaccgg	gaggacagct	gcctgtttcc	960
tccccaccag	cctcctcccc	acatccccag	ctgcctggct	gggtcctgaa	gccctctgtc	1020
tacctgggag	accaggggacc	acaggcctta	gggatacagg	gggtcccctt	ctgttaccac	1080
ccccaccctt	cctccaggac	accactaggt	ggtgtctggat	gcttgttctt	tggccagcca	1140
agggttcacgg	cgattctctcc	catgggatct	tgaggggacca	agctgtctggg	attgggaagg	1200
agtttccacc	tgaccgttgc	cctagccagg	ttcccaggag	gcctcaccat	actcccttcc	1260
agggccaggg	ctccagcaag	cccaggggcaa	ggatcctgtg	ctgctgtctg	gttgagagcc	1320
tgccaccgtg	tgtcgggagt	gtggggccagg	ctgagtgcac	aggtgacagg	gccgtgagca	1380
tgggcctggg	tgtgtgtgag	ctcaggccta	ggtgcgcagt	gtggagacgg	gtgtgtcgg	1440
ggaagaggtg	tggcttcaaa	gtgtgtgtgt	gcaggggggtg	ggtgtgttag	cgtgggttag	1500
gggaacgtgt	gtgcgcgtgc	tggtgggcat	gtgagatgag	tgactgccgg	tgaatgtgtc	1560
cacagttgag	agggtggagc	aggatgaggg	aatcctgtca	ccatcaataa	tacttgtgg	1620
agcgccagct	ctgcccaga	cgccacctgg	gcggacagcc	aggagctctc	catggccagg	1680
ctgcctgtgt	gcattgttccc	tgtctggtgc	ccctttgccc	gcctcctgca	aacctcacag	1740
gggtcccaca	caacagtgc	ctccagaagc	agccccctcg	aggcagagga	aggaaaatgg	1800
ggatggctgg	ggctctctcc	atcctccttt	tctccttgcc	ttcgcattgg	tggccttccc	1860
ctccaaaacc	tccattcccc	tgtgcccagc	ccctttgcca	tagcctgatt	ttggggagga	1920
ggaagggggc	atttgaggga	gaaggggaga	aagcttatgg	ctgggtctgg	tttcttccct	1980
tcccagaggg	tcttactgtt	ccagggtggc	cccaggggcag	gcagggggcca	cactatgcct	2040
gcgccttggt	aaagggtgacc	cctgccattt	accagcagcc	ctggcatgtt	cctgccccac	2100
aggaatagaa	tggagggagc	tccagaaact	ttccatccca	aaggcagctc	ccgtggttga	2160
agcagactgg	atttttgctc	tgccccctgac	cccttgtccc	tctttgaggg	aggggagcta	2220
tgctaggact	ccaacctcag	ggactcgggt	ggcctgcgct	agcttctttt	gatactgaaa	2280
acttttaagg	tgggaggggtg	gcaagggatg	tgcttaataa	atcaattcca	agcctcacct	2340

g

<210> 67

<211> 2109

<212> DNA

<213> Homo sapiens

<400> 67

gattcggcgg	gagctgccag	cggggaggct	gcagccgcgg	gttggttacag	ctgctggagc	60
agcagcggcc	cccgtccccg	ggaaccgttc	ccggggcggt	gatcttcggc	cccacacgaa	120
cagcagagag	gggcagcagg	atgaatgtgg	gcacagcgca	cagcgagggtg	aaccccaaca	180
cgcgggtgat	gaacagccgt	ggcatctggc	tctcctacgt	gctggccatc	ggtctcctcc	240
acatcgtgct	gctgagcatc	ccgtttgtga	gtgtccctgt	cgtctggacc	ctcaccaacc	300
tcattcacaa	catgggcatg	tatatcttcc	tgcacacggg	gaagggggaca	ccctttgaga	360

```

ccccggacca gggcaaggcg aggctgctaa cccactggga gcagatggat tatgggggtcc 420
agttcacggc ctctcggaag ttcttgacca tcacacccat cgtgctgtac ttcctcacca 480
gcttctacac taagtacgac cagatccatt ttgtgctcaa caccgtgtcc ctgatgagcg 540
tgcttatccc caagctgccc cagctccacg gagtccggat ttttggaaatc aataagtact 600
gagagtgcag ccccttcccc tgcccagggt ggcaggggag gggtagggta aaaggcatgt 660
gctgcaacac tgaagacaga aagaagaagc ctctggacac tgccagagat ggggggttag 720
cctctggcct aatttcccc ctctgctccc ccagtagcca acttgagta gcttgtagtg 780
gggttggggt agggccccctg ggctctgacc ttttctgaat tttttgatct ctctcttttg 840
ctttttgaat agagactoca tggagtgggt catggaatgg gctgggctcc tgggctgaac 900
atggaccacg cagttgcgac agggaggccag gggaaaaacc cctgctcact tgtttgcctt 960
caggcagcca aagcacttta acccctgcat agggagcaga gggcggtacg gcttctggat 1020
tgtttctactg tgattcctag gttttttcga tgccatgcag tgtgtgcttt tgtgtatgga 1080
agcaagtgtg ggatgggtct ttgcctttct gggtaggag ctgtctaata caagtcccag 1140
gcttttgga gcttctctgc aaccaccgt gggctcctgg tgggagtggg gagggtcagg 1200
ttggggaaa atggggtaga gtgtagatgg ctgtgttcca gaggtgaggg ggcagggtct 1260
gctgcatcc tgccctgggt gaggttgggg agctgtagga gagctagtga gtcgagactt 1320
agaagaatgg ggccacatag cagcagagga ctgggtgaag ggaggaggag gtagggacag 1380
aagctagacc caatctcctt tgggatgtgg gcaggaggag aagcaggctt ggagggttaa 1440
tttaccaca gaatgtgata gtaatagggg agggaggctg ctgtgggttt aactcctggg 1500
ttggctgttg ggtagacagg tggggaaaag gccctgtagt cattgtaagc acagggtccaa 1560
cttggccctg actcctgcgg gggtagtggg aagctgtgac agaaacgatg ggtgctgtgg 1620
tcctctgcag gccctacccc cttaacttcc tcatgcagac tggcactggg cagggcctct 1680
catgtggcag ccacatgtgg cgttgtgagg ccaccccatg tggggtctgt ggtgagagtc 1740
ctgtaggatc cctgctcaag cagcacagag gaaggggcaa gacgtggcct gtaggcactg 1800
tctcagcctg cagagaagaa agtgaggccg ggagcctgag cctgggctgg agccttctcc 1860
cctccccagt tggactaggg gcagtgtaa ttttgaaaag gtgtgggtcc ctgtgctctt 1920
ttccaggggt ccaagggaac aggagaggtc actgggcctg ttttctccct cctgacctg 1980
catctccac cctgtgtatc atagggaact ttcacctaa aatctttcta agcaaagtgt 2040
gaataggatt tttactccct ttgtacagta ttctgaggaa cgcaaataaa agggcaacat 2100
gtttctgtt
<210> 68

```

<211> 2423

<212> DNA

<213> Homo sapiens

```

<400> 68
gagagccgag ctacgcacga gcagtcgttg cggccgccgg cggccgggga ggtgggtggag 60
gcctagccgg agccgagagg tctctgttc cgtcccccag gtcccggt caccctccg 120
gcgccagtc cccgtcccgg aactcccgg cctgtcctgg gccccggtc tgtgcactcc 180
gctcgccgca gcgccggcc cggccgcac cggccggccc catgaggagg gacgtgaacg 240
gagtacca gagcaggttt gagatgtct caaatagtga tgaagctgta atcaataaaa 300
aactcccaa agaactcctg ttacggatat tttcttttct agatgttgtt accctgtgcc 360
gctgtgctca ggtctccagg gcctggaatg ttctggctct ggatggcagt aactggcagc 420
gaattgacct atttgatttc cagagggata ttgaggccg agtagtggag aatatttcaa 480
aacgatgtgg gggcttttta cgaaagttaa gtctctgtgg atgtcttggg gtgggagaca 540
atgcattaag aacctttgca caaaactgca ggaacattga agtactgaat ctaaatgggt 600
gtacaaagac aacagacgct acatgtacta gccttagcaa gttctgttcc aaactcaggc 660
accttgactt ggcttctgt acatcaataa caaacatgtc tctaaaagct ctgagtggag 720
gatgtccact gttggagcag ttgaacattt cctgggtgta ccaagtaacc aaggatggca 780
ttcaagcact agtgaggggc tgtgggggtc tcaaggcctt attcttaaaa ggctgcacgc 840
agctagaaga tgaagctctc aagtacatag gtgcacactg ccctgaactg gtgactttga 900
acttgacagc ttgcttgcaa atcacagatg aaggctctcat tactatatgc agagggtgcc 960
ataagttaca atccctttgt gcctctggct gctccaacat cacagatgcc atcctgaatg 1020
ctctaggtca gaactgcca cggttagaa tattggaagt ggcaagatgt tctcaattaa 1080
cagatgtggg ctttaccact ctagccagga attgccatga acttgaaaag atggacctgg 1140
aagagtgtgt tcagataaca gatagcacat taatccaact tctatacac tgcctcgac 1200
ttcaagtatt gagtctgtct cactgtgagc tgatcacaga tgatggaatt cgtcacctgg 1260
ggaatggggc ctgcgcccat gaccagctgg aggtgattga gctggacaac tgcccactaa 1320
tcacagatgc atccctggag cacttgaaga gctgtcatag ccttgagcgg atagaactct 1380
atgactgcca gcaaatacaca cgggctggaa tcaagagact caggacccat ttacccaata 1440
ttaaagtcca cgcctacttc gcacctgtca ctccacccc atcagtaggg ggcagcagac 1500

```

```

agcgcttctg cagatgctgc atcatcctat gacaatggag gtggtcaacc ttggcgaaact 1560
gagtattttaa tgacacttct agagctaccg tggagtctct ccagtggaag caacccagct 1620
gttctgagca agggttacaa agtgaggagg ggcagtgtcc agatccccag agccacacat 1680
acatacacat acacaccctt acccccattcc actctagctt tgtgaccatg ggactgaagt 1740
ttgtgatggc ttttttatca agtagattgg taaaatttaa ccattcctgt tgagggtgcc 1800
ataagaaaat cataggccaa gataggagg ggcattccag caaaccccg gttaatgcta 1860
ctgtgggttt taaatttttg tctaggggtt tctttgggga ttttagaaca gcatctgctg 1920
tcctccgggg tcaagaaaag catggaaaga caatatatga tgtaccagg gaccagaaag 1980
aaaatttctt tgcatcttag aaatggtaga cattcattgt gactaaagag cttctatgct 2040
tccttggttc catgccaaca tgctgagcat gctcacaag aaggctcgtc cattcctcct 2100
gtgttttagt atttggcca gaggtttcct aaatgggtgc cttgaaatca ctgtggtcca 2160
aatgtaatc ttacacactc aaattatcac tgtctgtagc acacttgtgc acctgtctta 2220
cattctctgt tgcctcccc cactctcttg ctgagctgt cacctgttca gtctgtctac 2280
tcactcaatt gttacccttt tgctgttgct gtgtttacag tttgcatttt gaatgattag 2340
ttgggattac caaacatttt ttaaaaagat attatcaata aatatttttt taattctaaa 2400
ttttaaaaaa aaaaaaaaaa aaa 2423

```

<210> 69

<211> 1841

<212> DNA

<213> Homo sapiens

<400> 69

```

agctgggacc ggaggggtgag cccggcagag gcagagacac acgcgagag gagagagggc 60
tgagggaggg agtgaggagaa ggacgggaga ggcagagaga ggagacacgc agagacactc 120
aggaggggag agacaccgag acgcagagac actcaggagg ggagagacac cgagacgcag 180
agacacccag gccggggagc gcgagggagc gaggcacaga cctggctcag cgagcgcggg 240
ggcgagagccc caggtcccga gagcctgggg gcgcgcccag cccgggcgccc gacctcctc 300
ccgctcccgc gccctcccct cggcgggcac ggtattttta tccgtgcgag aacagccctc 360
ctcctcctct cgccgcacag cccgcgcctc gcgcggggga gccagcaca gaccgcccgc 420
gggaccccga gtcgcgcacc ccagccccac cgccccccc gcgcgccatg gaccccaagg 480
accgaagaa gatccagttc tcggtgccc cgccccctag ccagctcgac ccccgccagg 540
tggagatgat ccggcgagc agaccaacgc ctgccatgct gttccggctc tcagagcact 600
cctcaccaga ggaggaagcc tccccccacc agagagcctc aggagagggg caccatctca 660
agtccaagag acccaacccc tgtgcctaca caccaccttc gctgaaagct gtgcagcgca 720
ttgctgagtc tcacctgcag tctatcagca atttgaatga gaaccaggcc tcagaggagg 780
aggatgagct gggggagctt cgggagctgg gttatccaag agaggaagat gaggaggaag 840
aggaggatga tgaagaagag gaagaagaag aggacagcca ggctgaagtc ctgaagggtca 900
tcaggcagtc tgctgggcaa aagacaacct gtggccaggg tctggaaggg ccctgggagc 960
gccacacccc tctggatgag tccgagagag atggaggctc tgaggacca gtggaagacc 1020
cagcactaag tgagcctggg gaggaacctc agcgcccttc cccctctgag cctggcacat 1080
aggcaccag cctgcatctc ccaggaggaa gtggagggga catcgctgtt cccagaaac 1140
ccactctatc ctacacctgt tttgtgctct tcccctcgcc tgctagggtc gcggttctg 1200
acttctagaa gactaaggct ggtctgtgtt tgctgttttg cccacctttg gctgataccc 1260
agagaacctg ggcacttgct gcctgatgcc caccctgcc agtcattcct ccattcaccc 1320
agcgggaggt gggatgtgag acagcccaca ttggaaaatc cagaaaaccg ggaacagggg 1380
tttgcccttc acaattctac tcccagatc ctctcccctg gacacaggag acccacaggg 1440
caggacccta agatctgggg aaaggaggtc ctgagaacct tgaggtaacc ttagatcctt 1500
ttctaccac ttctctatgg aggatccaa gtcaccactt ctctaccgg cttctaccag 1560
ggtccaggac taaggcgttt ttctccatag cctcaacatt ttgggaatct tcccttaac 1620
acccttgctc ctctgggtg cctggaagat ggactggcag agacctcttt gttgcgtttt 1680
gtgctttgat gccaggaatg ccgcctagtt tatgtcccc gtggggcaca cagcgggggg 1740
cgccagggtt tccttgctcc ccagctgctc tgccccttcc ccttcttccc ctgactccag 1800
gcctgaaccc ctcccgtgct gtaataaatc tttgtaata a 1841

```

<210> 70

<211> 748

<212> DNA

<213> Homo sapiens

```

<400> 70
ggccgcgatg agcgggggagc cgggggcagac gtccgtagcg cccctcccgc aggaggtcga 60
gccggggcagt ggggtccgca tcgtggtgga gtactgtgaa ccctgcccgc tcgaggcgac 120
ctacctggag ctggccagtg ctgtgaagga gcagtatccg ggcatcgaga tcgagtcgcg 180
cctcggggggc acaggtgcct ttgagataga gataaatgga cagctggtgt tctccaagct 240
ggagaatggg ggctttccct atgagaaaga tctcattgag gccatccgaa gagccagtaa 300
tggagaaacc ctagaaaaga tcaccaacag ccgtccctcc tgcgtcatcc tgtgactgca 360
caggactctg ggttcctgct ctgttctggg gtccaaacct tgggtccctt ttggtccctg 420
tgggagctcc ccctgcctct ttccctact tagctcctta gcaaagagac cctggcctcc 480
actttgccct ttgggtacaa agaaggaata gaagattccg tggccttggg gccaggagag 540
agacactctc catgaacact tctccagcca cctcatatcc ccttcccagg gtaagtcccc 600
acgaaagccc agtccactct tcgcctcggt aatacctgtc tgatgccaca gattttattt 660
attctcccct aacccagggc aatgtcagct attggcagta aagtggcgct acaaacacta 720
aaaaaaaaa aaaaaaaaaa aaaaaaaa 748

```

<210> 71

<211> 795

<212> DNA

<213> Homo sapiens

```

<400> 71
tacggctgcg agaagacgac agaagctaga cccaatctcc tttgggatgt gggcagggag 60
ggaagcaggc ttggaggggtt aatttaccga cagaatgtga tagtaatagg ggagggaggc 120
tgctgcgggt ttaactcctg ggttggtctg tgggtagaca ggtggggaaa aggcccgtga 180
gtcattgtaa gcacaggctc aacttggccc tgactcctgc gggggtatgg ggaagctgtg 240
acagaaacga tgggtgctgt ggtcctctgc aggcctcac cccttaactt cctcatacag 300
actggcactg ggcagggcct ctcatgtggc agccacatgt ggcgttgtga ggccacccca 360
tgtggggctc gtggtgagag tcctgtagga tcctgtctca agcagcacag aggaaggggc 420
aagacgtggc ctgtaggcac tgtctcagcc tgcagagaag aaagtggagg cgggagcctg 480
agcctgggct ggagccttct cccctcccca gttggactag gggcagtgtt aattttgaaa 540
agggtgtggg ccctgtgtct tcttccaggg gtccaaggga acaggagagg tcactgggcc 600
tgttttctcc ctctgacccc tgcactctcc acccctgtga tcatagggaa ctttcacctt 660
aaaatctttc taagcaaagt gtgaatagga tttttactcc ctttgtacag tattctgaga 720
aacgcaaata aaagggcaac atgtttctgt taaaaaaaaa aaaaagtacg caaaaaaaaa 780
aaaaaaaaa aaaaaa 795

```

<210> 72

<211> 2356

<212> DNA

<213> Homo sapiens

```

<400> 72
ggcacgaggc cggaagtgc ctctagagcg gtggtgaaac tggcagttga cggctcctgg 60
gactagatcc cgcgaggtag cccccgaact atttctctac gttttctctt gatcctccc 120
aaatcttcca gatccgcgta gtgaggaatc gtctccaccg tcatgggggg cggagacctg 180
aatctgaaga agagctggca cccgcagacc ctgaggaatg tggagaaagt gtggaaggcc 240
gagcagaagc atgaggctga gcggaagaag attgaggagc ttcagcggga gctgcgagaa 300
gagagagccc gggaagagat gcagcgctat gcggaggatg ttggggccgt caagaaaaaa 360
gaagaaaagt tggactggat gtaccagggt cctggtggga tgggtgaaccg tgacgagtag 420
ctgctggggc gccccattga caaatatgtt tttgagaaga tggaggagaa ggaggcaggc 480
tgctcttctg aaacaggact tctccaggc tctatctttg cccatcagg tgccaattcc 540
tctcttgaca tggccagcaa gatccgggag gaccactct tcatcatcag gaagaaggag 600
gaggagaaaa aacgagaggt attaaataat ccagtgaata tgaagaaat caaagaattg 660
ttgcaaatga gtctggaaaa aaaggagaag aagaaaaaga aggagaagaa aaagaagcac 720
aagaaacata agcacagaag ctcgagtagt gatcgttcca gcagcgagga tgagcacagt 780
gcaggggagat cacagaagaa gatggcaaat tcctcccctg ttttgtccaa agtccctgga 840

```

tatggcttac	aggtccggaa	ctctgaccgt	aaccagggtc	ttcagggtcc	tctgacagca	900
gagcaaaaga	gagggcatgg	gatgaagaac	cattccagat	ccagaagctc	ctccccactca	960
cccccaagac	atgccagcaa	gaagagcacc	aggggaagcag	gggtcccggga	caggagggtct	1020
cgatcccttg	gcagaaggtc	acgggtcccca	agacccagca	aactgcacaa	ctctaagggtg	1080
aacaggagag	agacaggcca	aactaggagc	ccatcaccta	aaaaagaggt	ctaccaaagg	1140
cgacatgctc	ccggatacac	cagaaaaactc	tctgcagagg	aattagagcg	aaaacggcaa	1200
gagatgatgg	aaaacgccaa	atggaggggag	gaggagagac	tgaacatcct	caagaggcat	1260
gctaaggatg	aggaacggga	gcagaggcta	gagaagctgg	actcccggga	tgggaagttc	1320
atccaccgca	tgaagctgga	gagtgcacat	acttccctccc	tggaggatcg	ggtgaagcgg	1380
aatatctact	ctttacagag	aacttcggta	gctctggaga	agaactttat	gaaaagatga	1440
aaactgtccc	ctctcttatt	ggttttcctg	cattttccag	ggaagctgct	gaccccttaa	1500
ttctctttat	aagagttcaa	atgacttctt	tcacagatgt	caaaccacca	gtgttcaaag	1560
tgaccctgct	tcatagatgc	ctgaaacagc	tcacttcctt	tgagagctag	tgtgacttgc	1620
tttgtgggac	actcagtaac	tttgggtttt	gactctttta	cgggtgggca	ctggaccatc	1680
tcgggtgggag	tgcttgtgcc	actctggaag	gctgttccct	ggggttgtga	tgtttatcat	1740
gccacttcct	tcttacctgt	gccaacagac	ctatttcact	gcctcagcgt	acaccagacc	1800
cttcagaaac	ctctctgggt	tcacccagat	agatttgtgt	tactgagaca	aatgaacggt	1860
tacttgatgt	agaagataat	gtgacagaat	gatgtcaggt	taggtcaaag	ccaagggagt	1920
gacagaatct	ggaaaatcaa	acaatacaaa	aagccctaaa	tgaactgtta	actatttgat	1980
ctttggatgt	aaaattgtta	tgcgatatgt	caatttttac	tgctttttta	taataagaacc	2040
aaaagggttag	ctttgtgaaa	ataccttgtt	tggtcaatga	ctttactggg	taataagaacc	2100
acattgaacc	ttgatggcaa	gtaatacaat	aaggcaggcc	agctcgtttt	tctctctgaa	2160
tctggctggt	ttaggaggag	cctgggttta	tcgacgagat	ctggagtagc	tattcttttc	2220
cactgcttgc	agtctccaat	gtaggcagtg	taaaaggata	gtaaaatgat	tttaggagtc	2280
agaaccaaat	tgccaatatg	ctccatggct	cctaaaggaa	aataaaatgg	aagtttttaa	2340
aaaaaaaaaa	aaaaaa					2356

<210> 73

<211> 1646

<212> DNA

<213> Homo sapiens

<400> 73	gtggaatgtc	atcagttaag	gctatttttca	tttctttttgt	ggatcttcag	ttgcttcagg	60
	ccatctggat	gtatacatgc	aggtcacagg	gaatatgatg	gcttagcttg	ggttcagagg	120
	cctgacacct	caggctgcca	aatgtggaag	atttaaatac	ttgaaccaat	accctcctcc	180
	caaaaactga	aattggcttc	tggtttctgag	ttgggtccagg	cgcaatgttc	agcgtatttg	240
	aggaaatcac	aagaattgta	gttaaggaga	tggtatgctgg	aggggatatg	attgccgtta	300
	gaagccttgt	tgatgctgat	agattccgct	gcttccatct	gggtgggggag	aagagaactt	360
	tctttggatg	ccggcactac	acaacaggcc	tcacctgat	ggacattctg	gacacacatg	420
	gggacaagtg	gttagatgaa	ctggattctg	ggctccaagg	tcaaaaggct	gagtttcaaa	480
	ttctggataa	tgtagactca	acgggagagt	tgatagttag	attacccaaa	gaaataacaa	540
	tttcaggcag	tttccagggc	ttccaccatc	agaaaatcaa	gatatcggag	aaccggatat	600
	cccagcagta	tctggctacc	cttgaaaaca	ggaagctgaa	gagggaacta	cccttttcat	660
	tccgatcaat	taatacgaga	gaaaacctgt	atctggtgac	agaaactctg	gagacggtaa	720
	aggaggaaac	cctgaaaagc	gaccggcaat	ataaattttg	gagccagatc	tctcagggcc	780
	atctcagcta	taaacacaag	ggccaaaagg	aagtgacat	ccccccaaat	cgggtcctga	840
	gctatcgagt	aaagcagctt	gtcttcccca	acaaggagac	gatgagaaag	tctttggggt	900
	cggaggattc	cagaaacatg	aaggagaagt	tggaggacat	ggagagtgtc	ctcaaggacc	960
	tgacagagga	gaagagaaaa	gatgtgctaa	actccctcgc	taagtgcctc	ggcaaggagg	1020
	atattcggca	ggatctagag	caaagagtat	ctgaggctct	gatttccggg	gagctacaca	1080
	tggaggaccc	agacaagcct	ctcctaagca	gcctttttta	tgctgctggg	gtcttggtag	1140
	aagcgcgtgc	aaaagccatt	ctggacttcc	tggtatgcct	gctagagctg	tctgaagagc	1200
	agcagtttgt	ggctgaggcc	ctggagaagg	ggacccttcc	tctgttgaag	gaccagggtg	1260
	aatctgtcat	ggagcagaac	tgggatgagc	tggccagcag	tcctcctgac	atggactatg	1320
	accctgaggc	acgaattctc	tgtgcgctgt	atggtgttgt	ctctatcctg	ctggagctgg	1380
	ctgagggggc	tacctctgtc	tcttctctaac	tacaaaagcc	ctttctcccc	acaagcctct	1440
	gggttttccc	tttaccagtc	tgtcctcact	gccatcgcca	ctaccatcct	gtcaccagtg	1500
	ggacctcttt	aaaacaagca	gccaaaccatt	ctttgatgta	tcccatctgc	tccatgttaa	1560
	catccaaaac	cagcctggat	ttcatacatg	gacttctgat	taaaagtggc	aggttgtgca	1620
	tggttaaaaa	aaaaaaaaa	aaaaaa				1646

<210> 74

<211> 3340

<212> DNA

<213> Homo sapiens

<400> 74

cgggcgccca	gagacagcgc	cgccctcagat	atcctgctgg	atgacattgt	ccttacccat	60
tctctcttcc	tcccgacgga	gaaatttctg	caggagctac	accagtactt	tggtcgggca	120
ggaggcatgg	agggccctga	agggctgggc	cggaagcaag	cctgtctagc	catgcttctc	180
catttcttgg	acacctacca	ggggctgctt	caagaggaag	agggggccgg	ccacatcatc	240
aaggatctat	acctgctaata	tatgaaggac	gagtcccttt	accagggcct	ccgagaggac	300
actctgaggc	tgaccagcgt	ggtggagacg	gtggaactaa	agattccaga	ggagaaccag	360
ccaccacgca	agcaggtgaa	gccactcttc	cgccacttcc	gccggataga	ctcctgtctg	420
cagaccgggg	tggccttccg	gggctctgat	gagatcttct	gccgtgtata	catgcctgac	480
cactcttatg	tgaccatacg	cagccgcctt	tcagcatctg	tgacggacat	tctgggctct	540
gtgacggaga	aacttcaata	ttcagaggag	cccgcggggc	gtgaggattc	cctcatcctg	600
gtagctgtgt	cctcctctgg	agagaaggtc	cttctccagc	ccactgagga	ctgtgttttc	660
accgcactgg	gcatcaacag	ccacctgttt	gcctgtactc	gggacagcta	tgaggctctg	720
gtgcccctcc	ccgaggagat	ccaggctctcc	cctggagaca	cagagatcca	ccgagtggag	780
cctgaggacg	ttgccaaaca	cctaactgcc	ttccactggg	agctgttccg	atgtgtgcat	840
gagctggagt	tcgtggacta	cgtgtttccac	ggggagcgcg	gccgcgggga	gacggccaac	900
ttggagctgc	tgctgcagcg	ctgcagcgag	gtcacgcact	gggtggccac	cgaagtgctg	960
ctctgcgagg	ccccgggcaa	gcgcgcgcag	ctgctcaaga	agttcatcaa	gatcgcgggc	1020
ctctgcaagc	agaaccagga	cctgctgtct	ttctacgccc	tggtcatggg	gctggacaac	1080
gccgctgtca	gccgccttgc	actcacctgg	gagaagctgc	cagggaaatt	caagaacttg	1140
tttcgcaaat	ttgagaacct	gacggacccc	tgacggaaac	acaaaagcta	ccgagaagtg	1200
atctccaaa	tgaagcccc	tgtgattccc	tctgtgcctc	tgatcctcaa	agacctgact	1260
ttctctcaac	aaggagtaaa	gaccttgtta	gatgttttgg	tgaacatcga	gaagctgcat	1320
tcagtgcccg	aaaaagtgg	gacaatccgc	aaataccgga	gccggccctt	ttgcctggac	1380
atggaggcat	cccccaatca	cctgcagacc	aaggcctatg	tgccgcagtt	tcagggtcatc	1440
gacaaccaga	acctcctctt	cgagctctcc	tacaagctgg	aggcaaacag	tcagtggagag	1500
tgagggtccc	agtcagaccc	gccagatcct	tgggcacctg	gcactcaagc	actttgcacg	1560
atgtctcaac	caacatctga	catctttccc	gtggagcaac	ttcctgtctc	acgggaaaga	1620
ggtcgatgga	tttaccctcg	gaccataaag	tctgttcatc	ctgctgaagt	cccctcccca	1680
ttgtcctctc	aagccaaaac	tacactttgc	tggttccctg	cccctctgag	aaaggggata	1740
gaaagctcct	tcctctatgt	cctcccatcg	agatctgttc	tggggatgga	gcttccaact	1800
tcctcttgca	gcaggaaaaga	atgctgtctc	ccctctgttc	ttgcagagtg	ggattgtggg	1860
agggattggc	agccttcttc	tcaccacact	gtccagcttc	ttcctggcta	gggctgggac	1920
ccccagggaat	attatgttgc	cgtgtgtgtg	tgtgtgtgtg	tgtgtgtgtg	tgtgtgtgtg	1980
tgtgtcttct	tttagggagc	aggagtgcac	ctggtaattg	aggggtggatg	ttgtgtgtgc	2040
tggggagggg	tccttctgtt	tggtgtctac	cttgtctact	ctgcccctgg	atggtgcggg	2100
gtgctttctc	cacccccaca	ctccctgtct	agctcctcgt	gctgcccctg	atgcccaggc	2160
ttgttagcca	aggtgctttt	tggggcaggg	agtagcagca	gggtggaggg	gttaccatc	2220
agcccttgca	agtccccac	tcaggcctct	ggaaggcca	gggatgggct	ctgatgagag	2280
ggtaaaagat	gctcagggaa	acacaggcct	cagctgccta	gaggaccctc	cccctgcctt	2340
gcagtgggct	cgggttagagc	agtatcagga	gctagggttg	tctgctgccc	acactcctgc	2400
tttttgggat	atctaactgc	taaggaggga	gttgacatcc	cccttctggc	tcattgtgtct	2460
gacaccaaca	acatggtctc	cgtccctctc	tcttagactc	tccttctgtc	ctccccatag	2520
agctgggggtg	gggtggatcc	ctatactggg	gcaggcagcc	ccaaagtggg	ggagggggat	2580
ggcagagact	gtaaaggcgc	cactggactc	tggaaggcc	tttattacct	ttactccctc	2640
cctctcccat	caccagcctc	aaggcctgag	gggtgcaggg	gctcctggca	gctactgggt	2700
gagggttctc	ggcacagact	cacccttctt	tctggcacca	ctctttccct	ttgaagaga	2760
cagcaacagc	cgtagcaaaa	gcagctgctg	ctcctgctat	gaggggtgat	atatttttta	2820
cccaaagctc	tggaattgta	catttatctt	ttaaaactca	aagagggaaa	gagccttgta	2880
tcatatgtga	acattgtatc	ataggtaatg	ttgtacagac	ccttttatac	agtgtctgtg	2940
cttggttctg	cagcaaaaat	cctctatgga	cataggaggt	gctgtgtccc	atgccttctt	3000
gcccgtgacg	tgtcccctgg	gcccccttct	gctcccctgc	ccctccctgc	tactgctgat	3060
gcactgtcct	ctcccctgag	ccccctggct	ccagccttcc	ctcctgacct	cttccaacag	3120
ccttggaact	ccagctgccca	ccaccctctg	ggctggacac	tggaagccac	tggcccagtc	3180
ttggctgctg	cttaccctta	gccttgatgc	ctgcccaggg	acccccagcc	ccctcccggt	3240
gcccgtgacg	tttaacagag	tgaacatgtg	gtattgtaca	ggcgcggttg	tcattgcaga	3300
aaccgctggg	tggagaagaa	gccgataaag	tctatgaatc			3340

<210> 75

<211> 4005

<212> DNA

<213> Homo sapiens

<400> 75

gggcaacagt	ctgcccacct	gtggacacca	gatcctggga	gctcctgggt	agcaagtgag	60
atctctggga	tgtcagtgag	gctgggtgaa	gaccagaggt	aaactgcaga	ggtcaccacc	120
cccaccatgt	cccaggtgat	gtccagccca	ctgctgggcag	gaggccatgc	tgtcagcttg	180
gcgccttggt	atgagcccag	gaggaccctg	caccacagcac	ccagccccag	cctgccaccc	240
cagtgttctt	actacaccac	ggaaggctgg	ggagcccagg	ccctgatggc	ccccgtgccc	300
tgcattggggc	cccctggccg	actccagcaa	gccccacagg	tggaggccaa	agccacctgc	360
ttcctgcccgt	cccctgggtga	gaaggccttg	gggaccccag	aggaccttga	ctcctacatt	420
gactttctcac	tggagagcct	caatcagatg	atcctggaaac	tggaccccac	cttccagctg	480
cttccccag	ggactggggg	ctcccaggct	gagctggccc	agagcaccat	gtcaatgaga	540
aagaaggagg	aatctgaagc	cttggacata	aagtacatcg	aggtgacctc	cgccagatca	600
aggtgccacg	attggcccca	gcactgctcc	agccccctctg	tcaccccgcg	cttcggctcc	660
cctgcagtg	gtggcctcct	cctttccaga	gacgtccccc	gagagacacg	aagcagcagt	720
gagagcctca	tcttctctgg	gaaccagggc	aggggggcacc	agcgccctct	gccccctca	780
gaggggtctct	cccctcgacc	cccaaattcc	cccagcatct	caatcccttg	catggggagc	840
aaggcctcga	gcccccatgg	tttgggctcc	ccgctgggtg	cttctccaag	actggagaag	900
cggtctgggag	gcctggcccc	acagcggggc	agcaggatct	ctgtgctgtc	agccagccca	960
gtgtctgatg	tcagctatat	gtttggaagc	agccagtccc	tcctgcactc	cagcaactcc	1020
agccatcagt	catcttccag	atccttggaa	agtccagcca	actcttctct	cagcctccac	1080
agccttggtc	cagtgtccct	gtgtacaaga	cccagtgact	tccaggctcc	cagaaacccc	1140
accctaacca	tgggccaacc	cagaacaccc	cactctccac	cactggccaa	agaacatgcc	1200
agcatctgcc	ccccatccat	caccaactcc	atgggtggaca	taccatttgt	gctgatcaac	1260
ggctgcccag	aaccagggtc	ttctccaccc	cagcggaccc	caggacacca	gaactccgtt	1320
caacctggag	ctgcttctcc	cagcaacccc	tgtccagcca	ccaggagcaa	cagccagacc	1380
ctgtcagatg	ccccctttac	cacatgcccc	gagggtcccg	ccagggacat	gcagcccacc	1440
atgaagtctg	tgatggacac	atctaaatac	tgggtttaagc	caaacatcac	ccgagagcaa	1500
gcaatcgagc	tgtctaggaa	ggaggagcca	ggggcttttg	tcataaggga	cagctcttca	1560
taccgaggct	ccttcggcct	ggccctgaag	gtgcaggagg	ttcccgcgtc	tgtcagaat	1620
cgagcagggt	aggacagcaa	tgacctcatc	cgacacttcc	tcacgcagtc	gtctgccaaa	1680
ggagtgcata	tcaaaggagc	agatgaggag	ccctactttg	ggagcctctc	tgccttcgtg	1740
tgccagcatt	ccatcatggc	cctggccctg	ccctgcaaac	tcaccatccc	acagagagaa	1800
ctgggagggtg	cagatggggc	ctcggactct	acagacagcc	cagcctcctg	ccagaagaaa	1860
tctgcccggct	gccacaccct	gtacctgagc	tcagttagcg	tggagaccct	gactggagcc	1920
ctggcctgtg	agaaagccat	ctccaccacc	tttgagaggg	acatcctccc	cacgcccacc	1980
gtggctccact	tcgaagtcac	agagcagggc	atcactctga	ctgatgtcca	gaggaagggtg	2040
tttttccggc	gccattaccc	actcaccacc	ctccgcttct	gtggtatgga	ccctgagcaa	2100
cggaagtggc	agaagtactg	caaaacctcc	tggatctttg	ggtttgtggc	caagagccag	2160
acagagcctc	aggagaacgt	atgccacctc	tttgccggagt	atgacatggg	ccagccagcc	2220
tcgcagggtca	tcggcctggg	gactgctctg	ctgcaggacg	cagaaaggat	gtaggggaga	2280
gactgctctg	gcacctaac	aacacctcca	ggggctcgct	aaggagcccc	cctccacccc	2340
ctgaatgggt	gtggcttgtg	gccatattga	cagaccaatc	tatgggacta	gggggattgg	2400
catcaagttg	acacccttga	acctgctatg	gccttcagca	gtcaccatca	tccagacccc	2460
ccgggcctca	gtttcctcaa	tcatagaaga	agaccaatag	acaagatcag	ctgttcttag	2520
atgctgggtg	gcatttgaac	atgctctctc	atgattctga	agcatgcaca	cctctgaaga	2580
ccctgcctg	aaaataacct	ccaaggaccc	tctgacccca	tcgaacctggg	ccctgccccc	2640
acaacagtct	gagcaagaga	cctgcagccc	ctgtttcgtg	gcagacagca	gggtgctggc	2700
ggtgacccac	ggggctcctg	gcttgcagct	ggtgatgggt	aagaactgac	tacaaaacag	2760
gaatggatag	actctatctc	cttccatata	tgttccctctg	ttccttttcc	cactttctgg	2820
gtggcttttt	gggtccaccc	agccaggatg	ctgcaggcca	agctgggtgt	ggtatttagg	2880
gcagctcagc	agggggaact	tgtcccatg	gtcagaggag	acccagctgt	cctgcacccc	2940
cttgcagatg	agtatcacc	catcttttct	ttccacttgg	tttttatttt	tatttttttt	3000
gagacagagt	ctcactgtca	cccaggctga	actgcagtg	tgtgatctag	gctcactgca	3060
acctccacct	cccaggttca	agcaattatc	gtccctcagg	ctcccagta	gctgggatta	3120
caggcatgtg	caactcacc	agctaatttt	gtatttttag	tagagacagg	gtttcaccat	3180
gttggccagg	ctggtcttga	actcctgacc	gcaggtaatc	cacctgcttc	ggcctcccaa	3240
agtgcctggga	ttacaggcgc	aagccaccca	gcccagcttc	tttccattcc	ttgataggcg	3300


```

agtattccaa agctggtatc gtagctgccc taatgttgca tattaggcgg cgggggcaga 3360
gataagggcc atctctctgt gattctgcct cagctcctgt cttgctgagc cctcccccaa 3420
cccacgctcc aacacacaca cacacacaca cacacacaca cacacacaca 3480
cagcggccctc tactgctatg tggcttcaac cagcctcaca gccacacggg ggaagcagag 3540
agtcaagaat gcaaagaggg cgcttcccta agaggcttgg aggagctggg ctctatccca 3600
caccaccccc caccaccccc ccaccagcc tcagaagct ggaaccattt ctcccgagg 3660
cctgagttcc taaggaaacc accctaccgg ggtggaaggg agggtcaggg aagaaaccca 3720
ctcttgctct acgaggagca agtgccctgcc ccctcccagc agccagccct gccaaagttg 3780
cattatcttt ggccaaggct gggcctgacg gttatgattt cagccctggg cctgcaggag 3840
aggctgagat cagccacccc agccagtggg cgagcactgc cccgccgcca aagtctgcag 3900
aatgtgagat gaggttctca aggtcacagg cccagtcgcc agcctggggg ctggcagagg 3960
cccccataata ctctgctaca gctcctatca tgaataataa aatgt 4005

```

<210> 76

<211> 1093

<212> PRT

<213> Homo sapiens

<400> 76

```

Met Lys Glu Met Val Gly Gly Cys Cys Val Cys Ser Asp Glu Arg Gly
1      5      10      15
Trp Ala Glu Asn Pro Leu Val Tyr Cys Asp Gly His Ala Cys Ser Val
      20      25      30
Ala Val His Gln Ala Cys Tyr Gly Ile Val Gln Val Pro Thr Gly Pro
      35      40      45
Trp Phe Cys Arg Lys Cys Glu Ser Gln Glu Arg Ala Ala Arg Val Arg
      50      55      60
Cys Glu Leu Cys Pro His Lys Asp Gly Ala Leu Lys Arg Thr Asp Asn
      65      70      75      80
Gly Gly Trp Ala His Val Val Cys Ala Leu Tyr Ile Pro Glu Val Gln
      85      90      95
Phe Ala Asn Val Leu Thr Met Glu Pro Ile Val Leu Gln Tyr Val Pro
      100      105      110
His Asp Arg Phe Asn Lys Thr Cys Tyr Ile Cys Glu Glu Thr Gly Arg
      115      120      125
Glu Ser Lys Ala Ala Ser Gly Ala Cys Met Thr Cys Asn Arg His Gly
      130      135      140
Cys Arg Gln Ala Phe His Val Thr Cys Ala Gln Met Ala Gly Leu Leu
      145      150      155      160
Cys Glu Glu Glu Val Leu Glu Val Asp Asn Val Lys Tyr Cys Gly Tyr
      165      170      175
Cys Lys Tyr His Phe Ser Lys Met Lys Thr Ser Arg His Ser Ser Gly
      180      185      190
Gly Gly Gly Gly Gly Ala Gly Gly Gly Gly Ser Met Gly Gly Gly
      195      200      205
Gly Ser Gly Phe Ile Ser Gly Arg Arg Ser Arg Ser Ala Ser Pro Ser
      210      215      220
Thr Gln Gln Glu Lys His Pro Thr His His Glu Arg Gly Gln Lys Lys
      225      230      235      240
Ser Arg Lys Asp Lys Glu Arg Leu Lys Gln Lys His Lys Lys Arg Pro
      245      250      255
Glu Ser Pro Pro Ser Ile Leu Thr Pro Pro Val Val Pro Thr Ala Asp
      260      265      270
Lys Val Ser Ser Ser Ala Ser Ser Ser His His Glu Ala Ser Thr
      275      280      285
Gln Glu Thr Ser Glu Ser Ser Arg Glu Ser Lys Gly Lys Lys Ser Ser
      290      295      300
Ser His Ser Leu Ser His Lys Gly Lys Lys Leu Ser Ser Gly Lys Gly
      305      310      315      320
Val Ser Ser Phe Thr Ser Ala Ser Ser Ser Ser Ser Ser Ser Ser
      325      330      335

```

Ser Ser Gly Gly Pro Phe Gln Pro Ala Val Ser Ser Leu Gln Ser Ser
 340 345 350
 Pro Asp Phe Ser Ala Phe Pro Lys Leu Glu Gln Pro Glu Glu Asp Lys
 355 360 365
 Tyr Ser Lys Pro Thr Ala Pro Ala Pro Ser Ala Pro Pro Ser Pro Ser
 370 375 380
 Ala Pro Glu Pro Pro Lys Ala Asp Leu Phe Glu Gln Lys Val Val Phe
 385 390 395 400
 Ser Gly Phe Gly Pro Ile Met Arg Phe Ser Thr Thr Thr Ser Ser Ser
 405 410 415
 Gly Arg Ala Arg Ala Pro Ser Pro Gly Asp Tyr Lys Ser Pro His Val
 420 425 430
 Thr Gly Ser Gly Ala Ser Ala Gly Thr His Lys Arg Met Pro Ala Leu
 435 440 445
 Ser Ala Thr Pro Val Pro Ala Asp Glu Thr Pro Glu Thr Gly Leu Lys
 450 455 460
 Glu Lys Lys His Lys Ala Ser Lys Arg Ser Arg His Gly Pro Gly Arg
 465 470 475 480
 Pro Lys Gly Ser Arg Asn Lys Glu Gly Thr Gly Gly Pro Ala Ala Pro
 485 490 495
 Ser Leu Pro Ser Ala Gln Leu Ala Gly Phe Thr Ala Thr Ala Ala Ser
 500 505 510
 Pro Phe Ser Gly Gly Ser Leu Val Ser Ser Gly Leu Gly Gly Leu Ser
 515 520 525
 Ser Arg Thr Phe Gly Pro Ser Gly Ser Leu Pro Ser Leu Ser Leu Glu
 530 535 540
 Ser Pro Leu Leu Gly Ala Gly Ile Tyr Thr Ser Asn Lys Asp Pro Ile
 545 550 555 560
 Ser His Ser Gly Gly Met Leu Arg Ala Val Cys Ser Thr Pro Leu Ser
 565 570 575
 Ser Ser Leu Leu Gly Pro Pro Gly Thr Ser Ala Leu Pro Arg Leu Ser
 580 585 590
 Arg Ser Pro Phe Thr Ser Thr Leu Pro Ser Ser Ser Ala Ser Ile Ser
 595 600 605
 Thr Thr Gln Val Phe Ser Leu Ala Gly Ser Thr Phe Ser Leu Pro Ser
 610 615 620
 Thr His Ile Phe Gly Thr Pro Met Gly Ala Val Asn Pro Leu Leu Ser
 625 630 635 640
 Gln Ala Glu Ser Ser His Thr Glu Pro Asp Leu Glu Asp Cys Ser Phe
 645 650 655
 Arg Cys Arg Gly Thr Ser Pro Gln Glu Ser Leu Ser Ser Met Ser Pro
 660 665 670
 Ile Ser Ser Leu Pro Ala Leu Phe Asp Gln Thr Ala Ser Ala Pro Cys
 675 680 685
 Gly Gly Gly Gln Leu Asp Pro Ala Ala Pro Gly Thr Thr Asn Met Glu
 690 695 700
 Gln Leu Leu Glu Lys Gln Gly Asp Gly Glu Ala Gly Val Asn Ile Val
 705 710 715 720
 Glu Met Leu Lys Ala Leu His Ala Leu Gln Lys Glu Asn Gln Arg Leu
 725 730 735
 Gln Glu Gln Ile Leu Ser Leu Thr Ala Lys Lys Glu Arg Leu Gln Ile
 740 745 750
 Leu Asn Val Gln Leu Ser Val Pro Phe Pro Ala Leu Pro Ala Ala Leu
 755 760 765
 Pro Ala Ala Asn Gly Pro Val Pro Gly Pro Tyr Gly Leu Pro Pro Gln
 770 775 780
 Ala Gly Ser Ser Asp Ser Leu Ser Thr Ser Lys Ser Pro Pro Gly Lys
 785 790 795 800
 Ser Ser Leu Gly Leu Asp Asn Ser Leu Ser Thr Ser Ser Glu Asp Pro
 805 810 815
 His Ser Gly Cys Pro Ser Arg Ser Ser Ser Ser Leu Ser Phe His Ser
 820 825 830
 Thr Pro Pro Pro Leu Pro Leu Leu Gln Gln Ser Pro Ala Thr Leu Pro
 835 840 845
 Leu Ala Leu Pro Gly Ala Pro Ala Pro Leu Pro Pro Gln Pro Gln Asn
 850 855 860

Gly Leu Gly Arg Ala Pro Gly Ala Ala Gly Leu Gly Ala Met Pro Met
 865 870 875 880
 Ala Glu Gly Leu Leu Gly Gly Leu Ala Gly Ser Gly Gly Leu Pro Leu
 885 890 895
 Asn Gly Leu Leu Gly Gly Leu Asn Gly Ala Ala Ala Pro Asn Pro Ala
 900 905 910
 Ser Leu Ser Gln Ala Gly Gly Ala Pro Thr Leu Gln Leu Pro Gly Cys
 915 920 925
 Leu Asn Ser Leu Thr Glu Gln Arg His Leu Leu Gln Gln Gln Glu
 930 935 940
 Gln Gln Leu Gln Gln Leu Gln Gln Leu Leu Ala Ser Pro Gln Leu Thr
 945 950 955 960
 Pro Glu His Gln Thr Val Val Tyr Gln Met Ile Gln Gln Ile Gln Gln
 965 970 975
 Lys Arg Glu Leu Gln Arg Leu Gln Met Ala Gly Gly Ser Gln Leu Pro
 980 985 990
 Met Ala Ser Leu Leu Ala Gly Ser Ser Thr Pro Leu Leu Ser Ala Gly
 995 1000 1005
 Thr Pro Gly Leu Leu Pro Thr Ala Ser Ala Pro Pro Leu Leu Pro
 1010 1015 1020
 Ala Gly Ala Leu Val Ala Pro Ser Leu Gly Asn Asn Thr Ser Leu
 1025 1030 1035
 Met Ala Ala Ala Ala Ala Ala Ala Ala Val Ala Ala Gly Gly
 1040 1045 1050
 Pro Pro Val Leu Thr Ala Gln Thr Asn Pro Phe Leu Ser Leu Ser
 1055 1060 1065
 Gly Ala Glu Gly Ser Gly Gly Gly Pro Lys Gly Gly Thr Ala Asp
 1070 1075 1080
 Lys Gly Ala Ser Ala Asn Gln Glu Lys Gly
 1085 1090
 <210> 77
 <211> 344
 <212> PRT
 <213> Homo sapiens

<400> 77
 Met His Arg Thr Thr Arg Ile Lys Ile Thr Glu Leu Asn Pro His Leu
 1 5 10 15
 Met Cys Ala Leu Cys Gly Gly Tyr Phe Ile Asp Ala Thr Thr Ile Val
 20 25 30
 Glu Cys Leu His Ser Phe Cys Lys Thr Cys Ile Val Arg Tyr Leu Glu
 35 40 45
 Thr Asn Lys Tyr Cys Pro Met Cys Asp Val Gln Val His Lys Thr Arg
 50 55 60
 Pro Leu Leu Ser Ile Arg Ser Asp Lys Thr Leu Gln Asp Ile Val Tyr
 65 70 75 80
 Lys Leu Val Pro Gly Leu Phe Lys Asp Glu Met Lys Arg Arg Arg Asp
 85 90 95
 Phe Tyr Ala Ala Tyr Pro Leu Thr Glu Val Pro Asn Gly Ser Asn Glu
 100 105 110
 Asp Arg Gly Glu Val Leu Glu Gln Glu Lys Gly Ala Leu Ser Asp Asp
 115 120 125
 Glu Ile Val Ser Leu Ser Ile Glu Phe Tyr Glu Gly Ala Arg Asp Arg
 130 135 140
 Asp Glu Lys Lys Gly Pro Leu Glu Asn Gly Asp Gly Asp Lys Glu Lys
 145 150 155 160
 Thr Gly Val Arg Phe Leu Arg Cys Pro Ala Ala Met Thr Val Met His
 165 170 175
 Leu Ala Lys Phe Leu Arg Asn Lys Met Asp Val Pro Ser Lys Tyr Lys
 180 185 190

<400>	78														
Met	Ser	Ser	Asn	Cys	Thr	Ser	Thr	Thr	Ala	Val	Ala	Val	Ala	Pro	Leu
1			5						10				15		
Ser	Ala	Ser	Lys	Thr	Lys	Thr	Lys	Lys	Lys	His	Phe	Val	Cys	Gln	Lys
			20					25					30		
Val	Lys	Leu	Phe	Arg	Ala	Ser	Glu	Pro	Ile	Leu	Ser	Val	Leu	Met	Trp
		35					40					45			
Gly	Val	Asn	His	Thr	Ile	Asn	Glu	Leu	Ser	Asn	Val	Pro	Val	Pro	Val
	50					55					60				
Met	Leu	Met	Pro	Asp	Asp	Phe	Lys	Ala	Tyr	Ser	Lys	Ile	Lys	Val	Asp
65					70						75				80
Asn	His	Leu	Phe	Asn	Lys	Glu	Asn	Leu	Pro	Ser	Arg	Phe	Lys	Phe	Lys
				85					90					95	
Glu	Tyr	Cys	Pro	Met	Val	Phe	Arg	Asn	Leu	Arg	Glu	Arg	Phe	Gly	Ile
			100					105					110		
Asp	Asp	Gln	Asp	Tyr	Gln	Asn	Ser	Val	Thr	Arg	Ser	Ala	Pro	Ile	Asn
		115					120					125			
Ser	Asp	Ser	Gln	Gly	Arg	Cys	Gly	Thr	Arg	Phe	Leu	Thr	Thr	Tyr	Asp
	130					135					140				
Arg	Arg	Phe	Val	Ile	Lys	Thr	Val	Ser	Ser	Glu	Asp	Val	Ala	Glu	Met
145					150					155				160	
His	Asn	Ile	Leu	Lys	Lys	Tyr	His	Gln	Phe	Ile	Val	Glu	Cys	His	Gly
				165					170					175	
Asn	Thr	Leu	Leu	Pro	Gln	Phe	Leu	Gly	Met	Tyr	Arg	Leu	Thr	Val	Asp
			180					185					190		
Gly	Val	Glu	Thr	Tyr	Met	Val	Val	Thr	Arg	Asn	Val	Phe	Ser	His	Arg
		195					200					205			
Leu	Thr	Val	His	Arg	Lys	Tyr	Asp	Leu	Lys	Gly	Ser	Thr	Val	Ala	Arg
	210					215					220				
Glu	Ala	Ser	Asp	Lys	Glu	Lys	Ala	Lys	Asp	Leu	Pro	Thr	Phe	Lys	Asp
225					230					235				240	
Asn	Asp	Phe	Leu	Asn	Glu	Gly	Gln	Lys	Leu	His	Val	Gly	Glu	Glu	Ser
				245					250					255	
Lys	Lys	Asn	Phe	Leu	Glu	Lys	Leu	Lys	Arg	Asp	Val	Glu	Phe	Leu	Ala
			260					265					270		

Gln Leu Lys Ile Met Asp Tyr Ser Leu Leu Val Gly Ile His Asp Val
 275 280 285
 Asp Arg Ala Glu Gln Glu Glu Met Glu Val Glu Glu Arg Ala Glu Asp
 290 295 300
 Glu Glu Cys Glu Asn Asp Gly Val Gly Gly Asn Leu Leu Cys Ser Tyr
 305 310 315 320
 Gly Thr Pro Pro Asp Ser Pro Gly Asn Leu Leu Ser Phe Pro Arg Phe
 325 330 335
 Phe Gly Pro Gly Glu Phe Asp Pro Ser Val Asp Val Tyr Ala Met Lys
 340 345 350
 Ser His Glu Ser Ser Pro Lys Lys Glu Val Tyr Phe Met Ala Ile Ile
 355 360 365
 Asp Ile Leu Thr Pro Tyr Asp Thr Lys Lys Lys Ala Ala His Ala Ala
 370 375 380
 Lys Thr Val Lys His Gly Ala Gly Ala Glu Ile Ser Thr Val Asn Pro
 385 390 395 400
 Glu Gln Tyr Ser Lys Arg Phe Asn Glu Phe Met Ser Asn Ile Leu Thr
 405 410 415

<210> 79

<211> 500

<212> PRT

<213> Homo sapiens

<400> 79

Met Arg Gly Glu Leu Trp Leu Leu Val Leu Val Leu Arg Glu Ala Ala
 1 5 10 15
 Arg Ala Leu Ser Pro Gln Pro Gly Ala Gly His Asp Glu Gly Pro Gly
 20 25 30
 Ser Gly Trp Ala Ala Lys Gly Thr Val Arg Gly Trp Asn Arg Arg Ala
 35 40 45
 Arg Glu Ser Pro Gly His Val Ser Glu Pro Asp Arg Thr Gln Leu Ser
 50 55 60
 Gln Asp Leu Gly Gly Gly Thr Leu Ala Met Asp Thr Leu Pro Asp Asn
 65 70 75 80
 Arg Thr Arg Val Val Glu Asp Asn His Ser Tyr Tyr Val Ser Arg Leu
 85 90 95
 Tyr Gly Pro Ser Glu Pro His Ser Arg Glu Leu Trp Val Asp Val Ala
 100 105 110
 Glu Ala Asn Arg Ser Gln Val Lys Ile His Thr Ile Leu Ser Asn Thr
 115 120 125
 His Arg Gln Ala Ser Arg Val Val Leu Ser Phe Asp Phe Pro Phe Tyr
 130 135 140
 Gly His Pro Leu Arg Gln Ile Thr Ile Ala Thr Gly Gly Phe Ile Phe
 145 150 155 160
 Met Gly Asp Val Ile His Arg Met Leu Thr Ala Thr Gln Tyr Val Ala
 165 170 175
 Pro Leu Met Ala Asn Phe Asn Pro Gly Tyr Ser Asp Asn Ser Thr Val
 180 185 190
 Val Tyr Phe Asp Asn Gly Thr Val Phe Val Val Gln Trp Asp His Val
 195 200 205
 Tyr Leu Gln Gly Trp Glu Asp Lys Gly Ser Phe Thr Phe Gln Ala Ala
 210 215 220
 Leu His His Asp Gly Arg Ile Val Phe Ala Tyr Lys Glu Ile Pro Met
 225 230 235 240
 Ser Val Pro Glu Ile Ser Ser Ser Gln His Pro Val Lys Thr Gly Leu
 245 250 255
 Ser Asp Ala Phe Met Ile Leu Asn Pro Ser Pro Asp Val Pro Glu Ser
 260 265 270
 Arg Arg Arg Ser Ile Phe Glu Tyr His Arg Ile Glu Leu Asp Pro Ser
 275 280 285

Lys Val Thr Ser Met Ser Ala Val Glu Phe Thr Pro Leu Pro Thr Cys
 290 295 300
 Leu Gln His Arg Ser Cys Asp Ala Cys Met Ser Ser Asp Leu Thr Phe
 305 310 315 320
 Asn Cys Ser Trp Cys His Val Leu Gln Arg Cys Ser Ser Gly Phe Asp
 325 330 335
 Arg Tyr Arg Gln Glu Trp Met Asp Tyr Gly Cys Ala Gln Glu Ala Glu
 340 345 350
 Gly Arg Met Cys Glu Asp Phe Gln Asp Glu Asp His Asp Ser Ala Ser
 355 360 365
 Pro Asp Thr Ser Phe Ser Pro Tyr Asp Gly Asp Leu Thr Thr Thr Ser
 370 375 380
 Ser Ser Leu Phe Ile Asp Ser Leu Thr Thr Glu Asp Asp Thr Lys Leu
 385 390 395 400
 Asn Pro Tyr Ala Gly Gly Asp Gly Leu Gln Asn Asn Leu Ser Pro Lys
 405 410 415
 Thr Lys Gly Thr Pro Val His Leu Gly Thr Ile Val Gly Ile Val Leu
 420 425 430
 Ala Val Leu Leu Val Ala Ala Ile Leu Ala Gly Ile Tyr Ile Asn
 435 440 445
 Gly His Pro Thr Ser Asn Ala Ala Leu Phe Phe Ile Glu Arg Arg Pro
 450 455 460
 His His Trp Pro Ala Met Lys Phe Arg Ser His Pro Asp His Ser Thr
 465 470 475 480
 Tyr Ala Glu Val Glu Pro Ser Gly His Glu Lys Glu Gly Phe Met Glu
 485 490 495
 Ala Glu Gln Cys
 500

<210> 80

<211> 509

<212> PRT

<213> Homo sapiens

<400> 80

Met Glu Asp Ile Gln Thr Asn Ala Glu Leu Lys Ser Thr Gln Glu Gln
 1 5 10 15
 Ser Val Pro Ala Glu Ser Ala Ala Val Leu Asn Asp Tyr Ser Leu Thr
 20 25 30
 Lys Ser His Glu Met Glu Asn Val Asp Ser Gly Glu Gly Pro Ala Asn
 35 40 45
 Glu Asp Glu Asp Ile Gly Asp Asp Ser Met Lys Val Lys Asp Glu Tyr
 50 55 60
 Ser Glu Arg Asp Glu Asn Val Leu Lys Ser Glu Pro Met Gly Asn Ala
 65 70 75 80
 Glu Glu Pro Glu Ile Pro Tyr Ser Tyr Ser Arg Glu Tyr Asn Glu Tyr
 85 90 95
 Glu Asn Ile Lys Leu Glu Arg His Val Val Ser Phe Asp Ser Ser Arg
 100 105 110
 Pro Thr Ser Gly Lys Met Asn Cys Asp Val Cys Gly Leu Ser Cys Ile
 115 120 125
 Ser Phe Asn Val Leu Met Val His Lys Arg Ser His Thr Gly Glu Arg
 130 135 140
 Pro Phe Gln Cys Asn Gln Cys Gly Ala Ser Phe Thr Gln Lys Gly Asn
 145 150 155 160
 Leu Leu Arg His Ile Lys Leu His Thr Gly Glu Lys Pro Phe Lys Cys
 165 170 175
 His Leu Cys Asn Tyr Ala Cys Gln Arg Arg Asp Ala Leu Thr Gly His
 180 185 190
 Leu Arg Thr His Ser Val Glu Lys Pro Tyr Lys Cys Glu Phe Cys Gly
 195 200 205

Arg Ser Tyr Lys Gln Arg Ser Ser Leu Glu Glu His Lys Glu Arg Cys
 210 215 220
 Arg Thr Phe Leu Gln Ser Thr Asp Pro Gly Asp Thr Ala Ser Ala Glu
 225 230 235 240
 Ala Arg His Ile Lys Ala Glu Met Gly Ser Glu Arg Ala Leu Val Leu
 245 250 255
 Asp Arg Leu Ala Ser Asn Val Ala Lys Arg Lys Ser Ser Met Pro Gln
 260 265 270
 Lys Phe Ile Gly Glu Lys Arg His Cys Phe Asp Val Asn Tyr Asn Ser
 275 280 285
 Ser Tyr Met Tyr Glu Lys Glu Ser Glu Leu Ile Gln Thr Arg Met Met
 290 295 300
 Asp Gln Ala Ile Asn Asn Ala Ile Ser Tyr Leu Gly Ala Glu Ala Leu
 305 310 315 320
 Cys Pro Leu Val Gln Thr Pro Pro Ala Pro Thr Ser Glu Met Val Pro
 325 330 335
 Val Ile Ser Ser Met Tyr Pro Ile Ala Leu Thr Arg Ala Glu Met Ser
 340 345 350
 Asn Gly Ala Pro Gln Glu Leu Glu Arg Lys Ser Ile Leu Leu Pro Glu
 355 360 365
 Lys Ser Val Pro Ser Glu Arg Gly Leu Ser Pro Asn Asn Ser Gly His
 370 375 380
 Asp Ser Thr Asp Thr Asp Ser Asn His Glu Glu Arg Gln Asn His Ile
 385 390 395 400
 Tyr Gln Gln Asn His Met Val Leu Ser Arg Ala Arg Asn Gly Met Pro
 405 410 415
 Leu Leu Lys Glu Val Pro Arg Ser Tyr Glu Leu Leu Lys Pro Pro Pro
 420 425 430
 Ile Cys Pro Arg Asp Ser Val Lys Val Ile Asp Lys Glu Gly Glu Val
 435 440 445
 Met Asp Val Tyr Arg Cys Asp His Cys Arg Val Leu Phe Leu Asp Tyr
 450 455 460
 Val Met Phe Thr Ile His Met Gly Cys His Gly Phe Arg Asp Pro Phe
 465 470 475 480
 Glu Cys Asn Met Cys Gly Asp Arg Ser His Asp Arg Tyr Glu Phe Ser
 485 490 495
 Ser His Ile Ala Arg Gly Glu His Arg Ser Leu Leu Lys
 500 505

<210> 81

<211> 440

<212> PRT

<213> Homo sapiens

<400> 81

Met Pro Ile Pro Pro Pro Pro Pro Pro Pro Gly Pro Pro Pro Pro
 1 5 10 15
 Pro Thr Phe His Gln Ala Asn Thr Glu Gln Pro Lys Leu Ser Arg Asp
 20 25 30
 Glu Gln Arg Gly Arg Gly Ala Leu Leu Gln Asp Ile Cys Lys Gly Thr
 35 40 45
 Lys Leu Lys Lys Val Thr Asn Ile Asn Asp Arg Ser Ala Pro Ile Leu
 50 55 60
 Glu Lys Pro Lys Gly Ser Gly Gly Tyr Gly Ser Gly Gly Ala Ala
 65 70 75 80
 Leu Gln Pro Lys Gly Gly Leu Phe Gln Gly Gly Val Leu Lys Leu Arg
 85 90 95
 Pro Val Gly Ala Lys Asp Gly Ser Glu Asn Leu Ala Gly Lys Pro Ala
 100 105 110
 Leu Gln Ile Pro Ser Ser Arg Ala Ala Ala Pro Arg Pro Pro Val Ser
 115 120 125

Ala Ala Ser Gly Arg Pro Gln Asp Asp Thr Asp Ser Ser Arg Ala Ser
 130 135 140
 Leu Pro Glu Leu Pro Arg Met Gln Arg Pro Ser Leu Pro Asp Leu Ser
 145 150 155 160
 Arg Pro Asn Thr Thr Ser Ser Thr Gly Met Lys His Ser Ser Ser Ala
 165 170 175
 Pro Pro Pro Pro Pro Gly Arg Arg Ala Asn Ala Pro Pro Thr Pro
 180 185 190
 Leu Pro Met His Ser Ser Lys Ala Pro Ala Tyr Asn Arg Glu Lys Pro
 195 200 205
 Leu Pro Pro Thr Pro Gly Gln Arg Leu His Pro Gly Arg Glu Gly Pro
 210 215 220
 Pro Ala Pro Pro Pro Val Lys Pro Pro Pro Ser Pro Val Asn Ile Arg
 225 230 235 240
 Thr Gly Pro Ser Gly Gln Ser Leu Ala Pro Pro Pro Pro Pro Tyr Arg
 245 250 255
 Gln Pro Pro Gly Val Pro Asn Gly Pro Ser Ser Pro Thr Asn Glu Ser
 260 265 270
 Ala Pro Glu Leu Pro Gln Arg His Asn Ser Leu His Arg Lys Thr Pro
 275 280 285
 Gly Pro Val Arg Gly Leu Ala Pro Pro Pro Pro Thr Ser Ala Ser Pro
 290 295 300
 Ser Leu Leu Ser Asn Arg Pro Pro Pro Ala Arg Asp Pro Pro Ser
 305 310 315 320
 Arg Gly Ala Ala Pro Pro Pro Pro Pro Val Ile Arg Asn Gly Ala
 325 330 335
 Arg Asp Ala Pro Pro Pro Pro Tyr Arg Met His Gly Ser Glu
 340 345 350
 Pro Pro Ser Arg Gly Lys Pro Pro Pro Pro Ser Arg Thr Pro Ala
 355 360 365
 Gly Pro Pro Pro Pro Pro Pro Pro Pro Leu Arg Asn Gly His Arg Asp
 370 375 380
 Ser Ile Thr Thr Val Arg Ser Phe Leu Asp Asp Phe Glu Ser Lys Tyr
 385 390 395 400
 Ser Phe His Pro Val Glu Asp Phe Pro Ala Pro Glu Glu Tyr Lys His
 405 410 415
 Phe Gln Arg Ile Tyr Pro Ser Lys Thr Asn Arg Ala Ala Arg Gly Ala
 420 425 430
 Pro Pro Leu Pro Pro Ile Leu Arg
 435 440
 <210> 82
 <211> 205
 <212> PRT
 <213> Homo sapiens
 <400> 82
 Met Ser Ile Met Ser Tyr Asn Gly Gly Ala Val Met Ala Met Lys Gly
 1 5 10 15
 Lys Asn Cys Val Ala Ile Ala Ala Asp Arg Arg Phe Gly Ile Gln Ala
 20 25 30
 Gln Met Val Thr Thr Asp Phe Gln Lys Ile Phe Pro Met Gly Asp Arg
 35 40 45
 Leu Tyr Ile Gly Leu Ala Gly Leu Ala Thr Asp Val Gln Thr Val Ala
 50 55 60
 Gln Arg Leu Lys Phe Arg Leu Asn Leu Tyr Glu Leu Lys Glu Gly Arg
 65 70 75 80
 Gln Ile Lys Pro Tyr Thr Leu Met Ser Met Val Ala Asn Leu Leu Tyr
 85 90 95
 Glu Lys Arg Phe Gly Pro Tyr Tyr Thr Glu Pro Val Ile Ala Gly Leu
 100 105 110

Asp Pro Lys Thr Phe Lys Pro Phe Ile Cys Ser Leu Asp Leu Ile Gly
 115 120 125
 Cys Pro Met Val Thr Asp Asp Phe Val Val Ser Gly Thr Cys Ala Glu
 130 135 140
 Gln Met Tyr Gly Met Cys Glu Ser Leu Trp Glu Pro Asn Met Asp Pro
 145 150 155 160
 Asp His Leu Phe Glu Thr Ile Ser Gln Ala Met Leu Asn Ala Val Asp
 165 170 175
 Arg Asp Ala Val Ser Gly Met Gly Val Ile Val His Ile Ile Glu Lys
 180 185 190
 Asp Lys Ile Thr Thr Arg Thr Leu Lys Ala Arg Met Asp
 195 200 205
 <210> 83
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 83
 Leu Thr Arg Ser Cys Ser Thr Cys Cys Pro Ala Val Ala Cys Leu Val
 1 5 10 15
 Gly Arg Gly Val Val Thr Ser Gly Ala Met His Gln Cys Trp Gly Glu
 20 25 30
 Glu Met Leu Gln Gly Met Leu Leu Trp Gly Trp Ala Thr Cys Pro Leu
 35 40 45
 Ser Asn Pro Gly Arg Trp Gly Arg Thr Val Gly Leu Gln His Pro Ala
 50 55 60
 Val Val Ser Ala Phe Arg Ala Leu Leu Leu Leu Met Leu Thr Val His
 65 70 75 80
 Val Ser Tyr Leu Ser Leu Ile Arg Phe Asp Tyr Gly Tyr Asn Leu Val
 85 90 95
 Ala Asn Val Ala Ile Gly Leu Val Asn Val Val Trp Trp Leu Ala Trp
 100 105 110
 Cys Leu Trp Asn Gln Arg Arg Leu Pro His Val Arg Lys Cys Val Val
 115 120 125
 Val Val Leu Leu Leu Gln Gly Leu Ser Leu Leu Glu Leu Leu Asp Phe
 130 135 140
 Pro Pro Leu Phe Trp Val Leu Asp Ala His Ala Ile Trp His Ile Ser
 145 150 155 160
 Thr Ile Pro Val His Val Leu Phe Phe Ser Phe Leu Glu Asp Asp Ser
 165 170 175
 Leu Tyr Leu Leu Lys Glu Ser Glu Asp Lys Phe Lys Leu Asp
 180 185 190
 <210> 84
 <211> 368
 <212> PRT
 <213> Homo sapiens

<400> 84
 Ala Pro Pro Pro Ala Ala Ser Gln Gly Glu Arg Met Ala Gly Leu Ala
 1 5 10 15
 Ala Arg Leu Val Leu Leu Ala Gly Ala Ala Ala Leu Ala Ser Gly Ser
 20 25 30
 Gln Gly Asp Arg Glu Pro Val Tyr Arg Asp Cys Val Leu Gln Cys Glu
 35 40 45
 Glu Gln Asn Cys Ser Gly Gly Ala Leu Asn His Phe Arg Ser Arg Gln
 50 55 60

Pro Ile Tyr Met Ser Leu Ala Gly Trp Thr Cys Arg Asp Asp Cys Lys
 65 70 75 80
 Tyr Glu Cys Met Trp Val Thr Val Gly Leu Tyr Leu Gln Glu Gly His
 85 90 95
 Lys Val Pro Gln Phe His Gly Lys Trp Pro Phe Ser Arg Phe Leu Phe
 100 105 110
 Phe Gln Glu Pro Ala Ser Ala Val Ala Ser Phe Leu Asn Gly Leu Ala
 115 120 125
 Ser Leu Val Met Leu Cys Arg Tyr Arg Thr Phe Val Pro Ala Ser Ser
 130 135 140
 Pro Met Tyr His Thr Cys Val Ala Phe Ala Trp Val Ser Leu Asn Ala
 145 150 155 160
 Trp Phe Trp Ser Thr Val Phe His Thr Arg Asp Thr Asp Leu Thr Glu
 165 170 175
 Lys Met Asp Tyr Phe Cys Ala Ser Thr Val Ile Leu His Ser Ile Tyr
 180 185 190
 Leu Cys Cys Val Arg Thr Val Gly Leu Gln His Pro Ala Val Val Ser
 195 200 205
 Ala Phe Arg Ala Leu Leu Leu Leu Met Leu Thr Val His Val Ser Tyr
 210 215 220
 Leu Ser Leu Ile Arg Phe Asp Tyr Gly Tyr Asn Leu Val Ala Asn Val
 225 230 235 240
 Ala Ile Gly Leu Val Asn Val Val Trp Trp Leu Ala Trp Cys Leu Trp
 245 250 255
 Asn Gln Arg Arg Leu Pro His Val Arg Lys Cys Val Val Val Val Leu
 260 265 270
 Leu Leu Gln Gly Leu Ser Leu Leu Glu Leu Leu Asp Phe Pro Pro Leu
 275 280 285
 Phe Trp Val Leu Asp Ala His Ala Ile Trp His Ile Ser Thr Ile Pro
 290 295 300
 Val His Val Leu Phe Phe Ser Phe Leu Glu Asp Asp Ser Leu Tyr Leu
 305 310 315 320
 Leu Lys Glu Ser Glu Asp Lys Phe Lys Leu Val Glu Ala Asp Trp Ile
 325 330 335
 Phe Ala Leu Pro Leu Thr Pro Cys Pro Ser Leu Arg Glu Gly Ser Tyr
 340 345 350
 Ala Arg Thr Pro Thr Ser Gly Thr Arg Val Ala Cys Ala Ser Phe Phe
 355 360 365
 <210> 85
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 85
 Leu Thr Arg Ser Cys Ser Thr Cys Cys Pro Ala Val Ala Cys Leu Val
 1 5 10 15
 Gly Arg Gly Val Val Thr Ser Gly Ala Met His Gln Cys Trp Gly Glu
 20 25 30
 Glu Met Leu Gln Gly Met Leu Leu Trp Gly Trp Ala Thr Cys Pro Leu
 35 40 45
 Ser Asn Pro Gly Arg Trp Gly Arg Thr Val Gly Leu Gln His Pro Ala
 50 55 60
 Val Val Ser Ala Phe Arg Ala Leu Leu Leu Leu Met Leu Thr Val His
 65 70 75 80
 Val Ser Tyr Leu Ser Leu Ile Arg Phe Asp Tyr Gly Tyr Asn Leu Val
 85 90 95
 Ala Asn Val Ala Ile Gly Leu Val Asn Val Val Trp Trp Leu Ala Trp
 100 105 110
 Cys Leu Trp Asn Gln Arg Arg Leu Pro His Val Arg Lys Cys Val Val
 115 120 125

Val Val Leu Leu Leu Gln Gly Leu Ser Leu Leu Glu Leu Leu Asp Phe
 130 135 140
 Pro Pro Leu Phe Trp Val Leu Asp Ala His Ala Ile Trp His Ile Ser
 145 150 155 160
 Thr Ile Pro Val His Val Leu Phe Phe Ser Phe Leu Glu Asp Asp Ser
 165 170 175
 Leu Tyr Leu Leu Lys Glu Ser Glu Asp Lys Phe Lys Leu Asp
 180 185 190

<210> 86

<211> 318

<212> PRT

<213> Homo sapiens

<400> 86
 Met Ala Gly Leu Ala Ala Arg Leu Val Leu Leu Ala Gly Ala Ala Ala
 1 5 10 15
 Leu Ala Ser Gly Ser Gln Gly Asp Arg Glu Pro Val Tyr Arg Asp Cys
 20 25 30
 Val Leu Gln Cys Glu Glu Gln Asn Cys Ser Gly Gly Ala Leu Asn His
 35 40 45
 Phe Arg Ser Arg Gln Pro Ile Tyr Met Ser Leu Ala Gly Trp Thr Cys
 50 55 60
 Arg Asp Asp Cys Lys Tyr Glu Cys Met Trp Val Thr Val Gly Leu Tyr
 65 70 75 80
 Leu Gln Glu Gly His Lys Val Pro Gln Phe His Gly Lys Trp Pro Phe
 85 90 95
 Ser Arg Phe Leu Phe Phe Gln Glu Pro Ala Ser Ala Val Ala Ser Phe
 100 105 110
 Leu Asn Gly Leu Ala Ser Leu Val Met Leu Cys Arg Tyr Arg Thr Phe
 115 120 125
 Val Pro Ala Ser Ser Pro Met Tyr His Thr Cys Val Ala Phe Ala Trp
 130 135 140
 Val Ser Leu Asn Ala Trp Phe Trp Ser Thr Val Phe His Thr Arg Asp
 145 150 155 160
 Thr Asp Leu Gln Arg Lys Trp Thr Thr Ser Val Pro Pro Val Ser Tyr
 165 170 175
 Thr Gln Ser Thr Cys Ala Ala Ser Gly Pro Trp Gly Cys Ser Thr Gln
 180 185 190
 Leu Trp Ser Ser Ala Phe Arg Ala Leu Leu Leu Met Leu Thr Val
 195 200 205
 His Val Ser Tyr Leu Ser Leu Ile Arg Phe Asp Tyr Gly Tyr Asn Leu
 210 215 220
 Val Ala Asn Val Ala Ile Gly Leu Val Asn Val Val Trp Trp Leu Ala
 225 230 235 240
 Trp Cys Leu Trp Asn Gln Arg Arg Leu Pro His Val Arg Lys Cys Val
 245 250 255
 Val Val Val Leu Leu Leu Gln Gly Leu Ser Leu Leu Glu Leu Leu Asp
 260 265 270
 Phe Pro Pro Leu Phe Trp Val Leu Asp Ala His Ala Ile Trp His Ile
 275 280 285
 Ser Thr Ile Pro Val His Val Leu Phe Phe Ser Phe Leu Glu Asp Asp
 290 295 300
 Ser Leu Tyr Leu Leu Lys Glu Ser Glu Asp Lys Phe Lys Leu
 305 310 315

<210> 87

<211> 226

<212> PRT

<213> Homo sapiens

<400> 87
 Met Ala Gly Leu Ala Ala Arg Leu Val Leu Leu Ala Gly Ala Ala Ala
 1 5 10 15
 Leu Ala Ser Gly Ser Gln Gly Asp Arg Glu Pro Val Tyr Arg Asp Cys
 20 25 30
 Val Leu Gln Cys Glu Glu Gln Asn Cys Ser Gly Gly Ala Leu Asn His
 35 40 45
 Phe Arg Ser Arg Gln Pro Ile Tyr Met Ser Leu Ala Gly Trp Thr Cys
 50 55 60
 Arg Asp Asp Cys Lys Tyr Glu Cys Met Trp Val Thr Val Gly Leu Tyr
 65 70 75 80
 Leu Gln Glu Gly His Lys Val Pro Gln Phe His Gly Lys Trp Pro Phe
 85 90 95
 Ser Arg Phe Leu Phe Phe Gln Glu Pro Ala Ser Ala Val Ala Ser Phe
 100 105 110
 Leu Asn Gly Leu Ala Ser Leu Val Met Leu Cys Arg Tyr Arg Thr Phe
 115 120 125
 Val Pro Ala Ser Ser Pro Met Tyr His Thr Cys Val Ala Phe Ala Trp
 130 135 140
 Val Ser Leu Asn Ala Trp Phe Trp Ser Thr Val Phe His Thr Arg Asp
 145 150 155 160
 Thr Asp Leu Thr Glu Lys Met Asp Tyr Phe Cys Ala Ser Thr Val Ile
 165 170 175
 Leu His Ser Ile Tyr Leu Cys Cys Val Arg Pro Gly Gln Arg Gly Val
 180 185 190
 Val Ala Gly Leu Val Pro Val Glu Pro Ala Ala Ala Ala Ser Arg Ala
 195 200 205
 Gln Val Arg Gly Gly Gly Leu Ala Ala Ala Gly Ala Val Pro Ala Arg
 210 215 220
 Ala Ala
 225
 <210> 88
 <211> 320
 <212> PRT
 <213> Homo sapiens

<400> 88
 Met Ala Gly Leu Ala Ala Arg Leu Val Leu Leu Ala Gly Ala Ala Ala
 1 5 10 15
 Leu Ala Ser Gly Ser Gln Gly Asp Arg Glu Pro Val Tyr Arg Asp Cys
 20 25 30
 Val Leu Gln Cys Glu Glu Gln Asn Cys Ser Gly Gly Ala Leu Asn His
 35 40 45
 Phe Arg Ser Arg Gln Pro Ile Tyr Met Ser Leu Ala Gly Trp Thr Cys
 50 55 60
 Arg Asp Asp Cys Lys Tyr Glu Cys Met Trp Val Thr Val Gly Leu Tyr
 65 70 75 80
 Leu Gln Glu Gly His Lys Val Pro Gln Phe His Gly Lys Trp Pro Phe
 85 90 95
 Ser Arg Phe Leu Phe Phe Gln Glu Pro Ala Ser Ala Val Ala Ser Phe
 100 105 110
 Leu Asn Gly Leu Ala Ser Leu Val Met Leu Cys Arg Tyr Arg Thr Phe
 115 120 125
 Val Pro Ala Ser Ser Pro Met Tyr His Thr Cys Val Ala Phe Ala Trp
 130 135 140
 Val Ser Leu Asn Ala Trp Phe Trp Ser Thr Val Phe His Thr Arg Asp
 145 150 155 160

Thr Asp Leu Thr Glu Lys Met Asp Tyr Phe Cys Ala Ser Thr Val Ile
 165 170 175
 Leu His Ser Ile Tyr Leu Cys Cys Val Arg Thr Val Gly Leu Gln His
 180 185 190
 Pro Ala Val Val Ser Ala Phe Arg Ala Leu Leu Leu Leu Met Leu Thr
 195 200 205
 Val His Val Ser Tyr Leu Ser Leu Ile Arg Phe Asp Tyr Gly Tyr Asn
 210 215 220
 Leu Val Ala Asn Val Ala Ile Gly Leu Val Asn Val Val Trp Trp Leu
 225 230 235 240
 Ala Trp Cys Leu Trp Asn Gln Arg Arg Leu Pro His Val Arg Lys Cys
 245 250 255
 Val Val Val Val Leu Leu Leu Gln Gly Leu Ser Leu Leu Glu Leu Leu
 260 265 270
 Asp Phe Pro Pro Leu Phe Trp Val Leu Asp Ala His Ala Ile Trp His
 275 280 285
 Ile Ser Thr Ile Pro Val His Val Leu Phe Phe Ser Phe Leu Glu Asp
 290 295 300
 Asp Ser Leu Tyr Leu Leu Lys Glu Ser Glu Asp Lys Phe Lys Leu Asp
 305 310 315 320
 <210> 89

<211> 217

<212> PRT

<213> Homo sapiens

<400> 89

Ala Pro Pro Pro Ala Ala Ser Gln Gly Glu Arg Met Ala Gly Leu Ala
 1 5 10 15
 Ala Arg Leu Val Leu Leu Ala Gly Ala Ala Leu Ala Ser Gly Ser
 20 25 30
 Gln Gly Asp Arg Glu Pro Val Tyr Arg Asp Cys Val Leu Gln Cys Glu
 35 40 45
 Glu Gln Asn Cys Ser Gly Gly Ala Leu Asn His Phe Arg Ser Arg Gln
 50 55 60
 Pro Ile Tyr Met Ser Leu Ala Gly Trp Thr Cys Arg Asp Asp Cys Lys
 65 70 75 80
 Tyr Glu Cys Met Trp Val Thr Val Gly Leu Tyr Leu Gln Glu Gly His
 85 90 95
 Lys Val Pro Gln Phe His Gly Lys Trp Pro Phe Ser Arg Phe Leu Phe
 100 105 110
 Phe Gln Glu Pro Ala Ser Ala Val Ala Ser Phe Leu Asn Gly Leu Ala
 115 120 125
 Ser Leu Val Met Leu Cys Arg Tyr Arg Thr Phe Val Pro Ala Ser Ser
 130 135 140
 Pro Met Tyr His Thr Cys Val Ala Phe Ala Trp Val Ser Leu Asn Ala
 145 150 155 160
 Trp Phe Trp Ser Thr Val Phe His Thr Arg Asp Thr Asp Leu Thr Glu
 165 170 175
 Lys Met Asp Tyr Phe Cys Ala Ser Thr Val Ile Leu His Ser Ile Tyr
 180 185 190
 Leu Cys Cys Val Ser Phe Leu Glu Asp Asp Ser Leu Tyr Leu Leu Lys
 195 200 205
 Glu Ser Glu Asp Lys Phe Lys Leu Asp
 210 215

<210> 90

<211> 153

<212> PRT

<213> Homo sapiens

<400> 90

```

Met Asn Val Gly Thr Ala His Ser Glu Val Asn Pro Asn Thr Arg Val
1      5      10      15
Met Asn Ser Arg Gly Ile Trp Leu Ser Tyr Val Leu Ala Ile Gly Leu
      20      25      30
Leu His Ile Val Leu Leu Ser Ile Pro Phe Val Ser Val Pro Val Val
      35      40      45
Trp Thr Leu Thr Asn Leu Ile His Asn Met Gly Met Tyr Ile Phe Leu
      50      55      60
His Thr Val Lys Gly Thr Pro Phe Glu Thr Pro Asp Gln Gly Lys Ala
65      70      75      80
Arg Leu Leu Thr His Trp Glu Gln Met Asp Tyr Gly Val Gln Phe Thr
      85      90      95
Ala Ser Arg Lys Phe Leu Thr Ile Thr Pro Ile Val Leu Tyr Phe Leu
      100      105      110
Thr Ser Phe Tyr Thr Lys Tyr Asp Gln Ile His Phe Val Leu Asn Thr
      115      120      125
Val Ser Leu Met Ser Val Leu Ile Pro Lys Leu Pro Gln Leu His Gly
      130      135      140
Val Arg Ile Phe Gly Ile Asn Lys Tyr
145      150

```

<210> 91

<211> 436

<212> PRT

<213> Homo sapiens

<400> 91

```

Met Arg Arg Asp Val Asn Gly Val Thr Lys Ser Arg Phe Glu Met Phe
1      5      10      15
Ser Asn Ser Asp Glu Ala Val Ile Asn Lys Lys Leu Pro Lys Glu Leu
      20      25      30
Leu Leu Arg Ile Phe Ser Phe Leu Asp Val Val Thr Leu Cys Arg Cys
      35      40      45
Ala Gln Val Ser Arg Ala Trp Asn Val Leu Ala Leu Asp Gly Ser Asn
      50      55      60
Trp Gln Arg Ile Asp Leu Phe Asp Phe Gln Arg Asp Ile Glu Gly Arg
65      70      75      80
Val Val Glu Asn Ile Ser Lys Arg Cys Gly Gly Phe Leu Arg Lys Leu
      85      90      95
Ser Leu Arg Gly Cys Leu Gly Val Gly Asp Asn Ala Leu Arg Thr Phe
      100      105      110
Ala Gln Asn Cys Arg Asn Ile Glu Val Leu Asn Leu Asn Gly Cys Thr
      115      120      125
Lys Thr Thr Asp Ala Thr Cys Thr Ser Leu Ser Lys Phe Cys Ser Lys
      130      135      140
Leu Arg His Leu Asp Leu Ala Ser Cys Thr Ser Ile Thr Asn Met Ser
145      150      155      160
Leu Lys Ala Leu Ser Glu Gly Cys Pro Leu Leu Glu Gln Leu Asn Ile
      165      170      175
Ser Trp Cys Asp Gln Val Thr Lys Asp Gly Ile Gln Ala Leu Val Arg
      180      185      190
Gly Cys Gly Glu Leu Lys Ala Leu Phe Leu Lys Gly Cys Thr Gln Leu
      195      200      205
Glu Asp Glu Ala Leu Lys Tyr Ile Gly Ala His Cys Pro Glu Leu Val
      210      215      220
Thr Leu Asn Leu Gln Thr Cys Leu Gln Ile Thr Asp Glu Gly Leu Ile
225      230      235      240

```

```

Thr Ile Cys Arg Gly Cys His Lys Leu Gln Ser Leu Cys Ala Ser Gly
      245      250      255
Cys Ser Asn Ile Thr Asp Ala Ile Leu Asn Ala Leu Gly Gln Asn Cys
      260      265      270
Pro Arg Leu Arg Ile Leu Glu Val Ala Arg Cys Ser Gln Leu Thr Asp
      275      280      285
Val Gly Phe Thr Thr Leu Ala Arg Asn Cys His Glu Leu Glu Lys Met
      290      295      300
Asp Leu Glu Glu Cys Val Gln Ile Thr Asp Ser Thr Leu Ile Gln Leu
      305      310      315      320
Ser Ile His Cys Pro Arg Leu Gln Val Leu Ser Leu Ser His Cys Glu
      325      330      335
Leu Ile Thr Asp Asp Gly Ile Arg His Leu Gly Asn Gly Ala Cys Ala
      340      345      350
His Asp Gln Leu Glu Val Ile Glu Leu Asp Asn Cys Pro Leu Ile Thr
      355      360      365
Asp Ala Ser Leu Glu His Leu Lys Ser Cys His Ser Leu Glu Arg Ile
      370      375      380
Glu Leu Tyr Asp Cys Gln Gln Ile Thr Arg Ala Gly Ile Lys Arg Leu
      385      390      395      400
Arg Thr His Leu Pro Asn Ile Lys Val His Ala Tyr Phe Ala Pro Val
      405      410      415
Thr Pro Pro Pro Ser Val Gly Gly Ser Arg Gln Arg Phe Cys Arg Cys
      420      425      430
Cys Ile Ile Leu
      435

```

<210> 92

<211> 204

<212> PRT

<213> Homo sapiens

<400> 92

```

Met Asp Pro Lys Asp Arg Lys Lys Ile Gln Phe Ser Val Pro Ala Pro
1      5      10      15
Pro Ser Gln Leu Asp Pro Arg Gln Val Glu Met Ile Arg Arg Arg
      20      25      30
Pro Thr Pro Ala Met Leu Phe Arg Leu Ser Glu His Ser Ser Pro Glu
      35      40      45
Glu Glu Ala Ser Pro His Gln Arg Ala Ser Gly Glu Gly His His Leu
      50      55      60
Lys Ser Lys Arg Pro Asn Pro Cys Ala Tyr Thr Pro Pro Ser Leu Lys
      65      70      75      80
Ala Val Gln Arg Ile Ala Glu Ser His Leu Gln Ser Ile Ser Asn Leu
      85      90      95
Asn Glu Asn Gln Ala Ser Glu Glu Glu Asp Glu Leu Gly Glu Leu Arg
      100      105      110
Glu Leu Gly Tyr Pro Arg Glu Glu Asp Glu Glu Glu Glu Asp Asp
      115      120      125
Glu Glu Glu Glu Glu Glu Asp Ser Gln Ala Glu Val Leu Lys Val
      130      135      140
Ile Arg Gln Ser Ala Gly Gln Lys Thr Thr Cys Gly Gln Gly Leu Glu
      145      150      155      160
Gly Pro Trp Glu Arg Pro Pro Pro Leu Asp Glu Ser Glu Arg Asp Gly
      165      170      175
Gly Ser Glu Asp Gln Val Glu Asp Pro Ala Leu Ser Glu Pro Gly Glu
      180      185      190
Glu Pro Gln Arg Pro Ser Pro Ser Glu Pro Gly Thr
      195      200

```

<210> 93

<211> 115

<212> PRT

<213> Homo sapiens

<400> 93

```

Met Ser Gly Glu Pro Gly Gln Thr Ser Val Ala Pro Pro Pro Glu Glu
1      5      10      15
Val Glu Pro Gly Ser Gly Val Arg Ile Val Val Glu Tyr Cys Glu Pro
      20      25      30
Cys Gly Phe Glu Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val Lys Glu
      35      40      45
Gln Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala
      50      55      60
Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn
65      70      75      80
Gly Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg Arg Ala
      85      90      95
Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro Pro Cys
      100      105      110
Val Ile Leu
      115

```

<210> 94

<211> 144

<212> PRT

<213> Homo sapiens

<400> 94

```

Met Gly Ala Val Val Leu Cys Arg Pro Ser Pro Leu Asn Phe Leu Ile
1      5      10      15
Gln Thr Gly Thr Gly Gln Gly Leu Ser Cys Gly Ser His Met Trp Arg
      20      25      30
Cys Glu Ala Thr Pro Cys Gly Val Cys Gly Glu Ser Pro Val Gly Ser
      35      40      45
Leu Leu Lys Gln His Arg Gly Arg Gly Lys Thr Trp Pro Val Gly Thr
      50      55      60
Val Ser Ala Cys Arg Glu Glu Ser Glu Ala Gly Ser Leu Ser Leu Gly
65      70      75      80
Trp Ser Leu Leu Pro Ser Pro Val Gly Leu Gly Ala Val Leu Ile Leu
      85      90      95
Lys Arg Cys Gly Ser Leu Cys Pro Leu Pro Gly Val Gln Gly Asn Arg
      100      105      110
Arg Gly His Trp Ala Cys Phe Leu Pro Pro Asp Pro Ala Ser Pro Thr
      115      120      125
Pro Cys Ile Ile Gly Asn Phe His Leu Lys Ile Phe Leu Ser Lys Val
      130      135      140

```

<210> 95

<211> 425

<212> PRT

<213> Homo sapiens

<400> 95

```

Met Gly Gly Gly Asp Leu Asn Leu Lys Lys Ser Trp His Pro Gln Thr
1      5      10      15

```


Met Phe Ser Val Phe Glu Glu Ile Thr Arg Ile Val Val Lys Glu Met
1 5 10 15

Asp Ala Gly Gly Asp Met Ile Ala Val Arg Ser Leu Val Asp Ala Asp
 20 25 30
 Arg Phe Arg Cys Phe His Leu Val Gly Glu Lys Arg Thr Phe Phe Gly
 35 40 45
 Cys Arg His Tyr Thr Thr Gly Leu Thr Leu Met Asp Ile Leu Asp Thr
 50 55 60
 His Gly Asp Lys Trp Leu Asp Glu Leu Asp Ser Gly Leu Gln Gly Gln
 65 70 75 80
 Lys Ala Glu Phe Gln Ile Leu Asp Asn Val Asp Ser Thr Gly Glu Leu
 85 90 95
 Ile Val Arg Leu Pro Lys Glu Ile Thr Ile Ser Gly Ser Phe Gln Gly
 100 105 110
 Phe His His Gln Lys Ile Lys Ile Ser Glu Asn Arg Ile Ser Gln Gln
 115 120 125
 Tyr Leu Ala Thr Leu Glu Asn Arg Lys Leu Lys Arg Glu Leu Pro Phe
 130 135 140
 Ser Phe Arg Ser Ile Asn Thr Arg Glu Asn Leu Tyr Leu Val Thr Glu
 145 150 155 160
 Thr Leu Glu Thr Val Lys Glu Glu Thr Leu Lys Ser Asp Arg Gln Tyr
 165 170 175
 Lys Phe Trp Ser Gln Ile Ser Gln Gly His Leu Ser Tyr Lys His Lys
 180 185 190
 Gly Gln Arg Glu Val Thr Ile Pro Pro Asn Arg Val Leu Ser Tyr Arg
 195 200 205
 Val Lys Gln Leu Val Phe Pro Asn Lys Glu Thr Met Arg Lys Ser Leu
 210 215 220
 Gly Ser Glu Asp Ser Arg Asn Met Lys Glu Lys Leu Glu Asp Met Glu
 225 230 235 240
 Ser Val Leu Lys Asp Leu Thr Glu Glu Lys Arg Lys Asp Val Leu Asn
 245 250 255
 Ser Leu Ala Lys Cys Leu Gly Lys Glu Asp Ile Arg Gln Asp Leu Glu
 260 265 270
 Gln Arg Val Ser Glu Val Leu Ile Ser Gly Glu Leu His Met Glu Asp
 275 280 285
 Pro Asp Lys Pro Leu Leu Ser Ser Leu Phe Asn Ala Ala Gly Val Leu
 290 295 300
 Val Glu Ala Arg Ala Lys Ala Ile Leu Asp Phe Leu Asp Ala Leu Leu
 305 310 315 320
 Glu Leu Ser Glu Glu Gln Gln Phe Val Ala Glu Ala Leu Glu Lys Gly
 325 330 335
 Thr Leu Pro Leu Leu Lys Asp Gln Val Lys Ser Val Met Glu Gln Asn
 340 345 350
 Trp Asp Glu Leu Ala Ser Ser Pro Pro Asp Met Asp Tyr Asp Pro Glu
 355 360 365
 Ala Arg Ile Leu Cys Ala Leu Tyr Val Val Val Ser Ile Leu Leu Glu
 370 375 380
 Leu Ala Glu Gly Pro Thr Ser Val Ser Ser
 385 390

<210> 97

<211> 456

<212> PRT

<213> Homo sapiens

<400> 97

Met Glu Gly Pro Glu Gly Leu Gly Arg Lys Gln Ala Cys Leu Ala Met
 1 5 10 15
 Leu Leu His Phe Leu Asp Thr Tyr Gln Gly Leu Leu Gln Glu Glu
 20 25 30
 Gly Ala Gly His Ile Ile Lys Asp Leu Tyr Leu Leu Ile Met Lys Asp
 35 40 45

Glu Ser Leu Tyr Gln Gly Leu Arg Glu Asp Thr Leu Arg Leu His Gln
 50 55 60
 Leu Val Glu Thr Val Glu Leu Lys Ile Pro Glu Glu Asn Gln Pro Pro
 65 70 75 80
 Ser Lys Gln Val Lys Pro Leu Phe Arg His Phe Arg Arg Ile Asp Ser
 85 90 95
 Cys Leu Gln Thr Arg Val Ala Phe Arg Gly Ser Asp Glu Ile Phe Cys
 100 105 110
 Arg Val Tyr Met Pro Asp His Ser Tyr Val Thr Ile Arg Ser Arg Leu
 115 120 125
 Ser Ala Ser Val Gln Asp Ile Leu Gly Ser Val Thr Glu Lys Leu Gln
 130 135 140
 Tyr Ser Glu Glu Pro Ala Gly Arg Glu Asp Ser Leu Ile Leu Val Ala
 145 150 155 160
 Val Ser Ser Ser Gly Glu Lys Val Leu Leu Gln Pro Thr Glu Asp Cys
 165 170 175
 Val Phe Thr Ala Leu Gly Ile Asn Ser His Leu Phe Ala Cys Thr Arg
 180 185 190
 Asp Ser Tyr Glu Ala Leu Val Pro Leu Pro Glu Glu Ile Gln Val Ser
 195 200 205
 Pro Gly Asp Thr Glu Ile His Arg Val Glu Pro Glu Asp Val Ala Asn
 210 215 220
 His Leu Thr Ala Phe His Trp Glu Leu Phe Arg Cys Val His Glu Leu
 225 230 235 240
 Glu Phe Val Asp Tyr Val Phe His Gly Glu Arg Gly Arg Arg Glu Thr
 245 250 255
 Ala Asn Leu Glu Leu Leu Gln Arg Cys Ser Glu Val Thr His Trp
 260 265 270
 Val Ala Thr Glu Val Leu Leu Cys Glu Ala Pro Gly Lys Arg Ala Gln
 275 280 285
 Leu Leu Lys Lys Phe Ile Lys Ile Ala Ala Leu Cys Lys Gln Asn Gln
 290 295 300
 Asp Leu Leu Ser Phe Tyr Ala Val Val Met Gly Leu Asp Asn Ala Ala
 305 310 315 320
 Val Ser Arg Leu Arg Leu Thr Trp Glu Lys Leu Pro Gly Lys Phe Lys
 325 330 335
 Asn Leu Phe Arg Lys Phe Glu Asn Leu Thr Asp Pro Cys Arg Asn His
 340 345 350
 Lys Ser Tyr Arg Glu Val Ile Ser Lys Met Lys Pro Pro Val Ile Pro
 355 360 365
 Phe Val Pro Leu Ile Leu Lys Asp Leu Thr Phe Leu His Glu Gly Ser
 370 375 380
 Lys Thr Leu Val Asp Gly Leu Val Asn Ile Glu Lys Leu His Ser Val
 385 390 395 400
 Ala Glu Lys Val Arg Thr Ile Arg Lys Tyr Arg Ser Arg Pro Leu Cys
 405 410 415
 Leu Asp Met Glu Ala Ser Pro Asn His Leu Gln Thr Lys Ala Tyr Val
 420 425 430
 Arg Gln Phe Gln Val Ile Asp Asn Gln Asn Leu Leu Phe Glu Leu Ser
 435 440 445
 Tyr Lys Leu Glu Ala Asn Ser Gln
 450 455
 <210> 98
 <211> 715
 <212> PRT
 <213> Homo sapiens
 <400> 98
 Met Ser Gln Val Met Ser Ser Pro Leu Leu Ala Gly Gly His Ala Val
 1 5 10 15

Ser Leu Ala Pro Cys Asp Glu Pro Arg Arg Thr Leu His Pro Ala Pro
 20 25 30
 Ser Pro Ser Leu Pro Pro Gln Cys Ser Tyr Tyr Thr Thr Glu Gly Trp
 35 40 45
 Gly Ala Gln Ala Leu Met Ala Pro Val Pro Cys Met Gly Pro Pro Gly
 50 55 60
 Arg Leu Gln Gln Ala Pro Gln Val Glu Ala Lys Ala Thr Cys Phe Leu
 65 70 75 80
 Pro Ser Pro Gly Glu Lys Ala Leu Gly Thr Pro Glu Asp Leu Asp Ser
 85 90 95
 Tyr Ile Asp Phe Ser Leu Glu Ser Leu Asn Gln Met Ile Leu Glu Leu
 100 105 110
 Asp Pro Thr Phe Gln Leu Leu Pro Pro Gly Thr Gly Gly Ser Gln Ala
 115 120 125
 Glu Leu Ala Gln Ser Thr Met Ser Met Arg Lys Lys Glu Glu Ser Glu
 130 135 140
 Ala Leu Asp Ile Lys Tyr Ile Glu Val Thr Ser Ala Arg Ser Arg Cys
 145 150 155 160
 His Asp Trp Pro Gln His Cys Ser Ser Pro Ser Val Thr Pro Pro Phe
 165 170 175
 Gly Ser Pro Arg Ser Gly Gly Leu Leu Ser Arg Asp Val Pro Arg
 180 185 190
 Glu Thr Arg Ser Ser Ser Glu Ser Leu Ile Phe Ser Gly Asn Gln Gly
 195 200 205
 Arg Gly His Gln Arg Pro Leu Pro Pro Ser Glu Gly Leu Ser Pro Arg
 210 215 220
 Pro Pro Asn Ser Pro Ser Ile Ser Ile Pro Cys Met Gly Ser Lys Ala
 225 230 235 240
 Ser Ser Pro His Gly Leu Gly Ser Pro Leu Val Ala Ser Pro Arg Leu
 245 250 255
 Glu Lys Arg Leu Gly Gly Leu Ala Pro Gln Arg Gly Ser Arg Ile Ser
 260 265 270
 Val Leu Ser Ala Ser Pro Val Ser Asp Val Ser Tyr Met Phe Gly Ser
 275 280 285
 Ser Gln Ser Leu Leu His Ser Ser Asn Ser Ser His Gln Ser Ser Ser
 290 295 300
 Arg Ser Leu Glu Ser Pro Ala Asn Ser Ser Ser Ser Leu His Ser Leu
 305 310 315 320
 Gly Ser Val Ser Leu Cys Thr Arg Pro Ser Asp Phe Gln Ala Pro Arg
 325 330 335
 Asn Pro Thr Leu Thr Met Gly Gln Pro Arg Thr Pro His Ser Pro Pro
 340 345 350
 Leu Ala Lys Glu His Ala Ser Ile Cys Pro Pro Ser Ile Thr Asn Ser
 355 360 365
 Met Val Asp Ile Pro Ile Val Leu Ile Asn Gly Cys Pro Glu Pro Gly
 370 375 380
 Ser Ser Pro Pro Gln Arg Thr Pro Gly His Gln Asn Ser Val Gln Pro
 385 390 395 400
 Gly Ala Ala Ser Pro Asn Pro Cys Pro Ala Thr Arg Ser Asn Ser
 405 410 415
 Gln Thr Leu Ser Asp Ala Pro Phe Thr Thr Cys Pro Glu Gly Pro Ala
 420 425 430
 Arg Asp Met Gln Pro Thr Met Lys Phe Val Met Asp Thr Ser Lys Tyr
 435 440 445
 Trp Phe Lys Pro Asn Ile Thr Arg Glu Gln Ala Ile Glu Leu Leu Arg
 450 455 460
 Lys Glu Glu Pro Gly Ala Phe Val Ile Arg Asp Ser Ser Ser Tyr Arg
 465 470 475 480
 Gly Ser Phe Gly Leu Ala Leu Lys Val Gln Glu Val Pro Ala Ser Ala
 485 490 495
 Gln Asn Arg Pro Gly Glu Asp Ser Asn Asp Leu Ile Arg His Phe Leu
 500 505 510
 Ile Glu Ser Ser Ala Lys Gly Val His Leu Lys Gly Ala Asp Glu Glu
 515 520 525
 Pro Tyr Phe Gly Ser Leu Ser Ala Phe Val Cys Gln His Ser Ile Met
 530 535 540

- 105 -

Ala Leu Ala Leu Pro Cys Lys Leu Thr Ile Pro Gln Arg Glu Leu Gly
 545 550 555 560
 Gly Ala Asp Gly Ala Ser Asp Ser Thr Asp Ser Pro Ala Ser Cys Gln
 565 570 575
 Lys Lys Ser Ala Gly Cys His Thr Leu Tyr Leu Ser Ser Val Ser Val
 580 585 590
 Glu Thr Leu Thr Gly Ala Leu Ala Val Gln Lys Ala Ile Ser Thr Thr
 595 600 605
 Phe Glu Arg Asp Ile Leu Pro Thr Pro Thr Val Val His Phe Glu Val
 610 615 620
 Thr Glu Gln Gly Ile Thr Leu Thr Asp Val Gln Arg Lys Val Phe Phe
 625 630 635 640
 Arg Arg His Tyr Pro Leu Thr Thr Leu Arg Phe Cys Gly Met Asp Pro
 645 650 655
 Glu Gln Arg Lys Trp Gln Lys Tyr Cys Lys Pro Ser Trp Ile Phe Gly
 660 665 670
 Phe Val Ala Lys Ser Gln Thr Glu Pro Gln Glu Asn Val Cys His Leu
 675 680 685
 Phe Ala Glu Tyr Asp Met Val Gln Pro Ala Ser Gln Val Ile Gly Leu
 690 695 700
 Val Thr Ala Leu Leu Gln Asp Ala Glu Arg Met
 705 710 715

<210> 99

<211> 35

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 99

ccatatataa aaccactgtc ctgtcctttg tggct

35

<210> 100

<211> 26

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 100

cccccatctg tctgtctata tttgtc

26

<210> 101

<211> 22

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 101

tgccctacgct gacgactatg tg 22
<210> 102

<211> 25
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 102
tttggttttc tacaactggt gctat 25
<210> 103

<211> 19
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 103
gggctccaca caccagatg 19
<210> 104

<211> 21
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 104
acgctctgag caccctctac a 21
<210> 105

<211> 31
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 105
tgtcacaggg actgaaaacc tctcctcatg t 31
<210> 106

<211> 17
<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 106

cccaaggcca cgagctt

17

<210> 107

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 107

tggtgctctc ttaacgaatc gaaa

24

<210> 108

<211> 29

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 108

ctggtcaaac aaactctctg aaccctcc

29

<210> 109

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 109

tggtgaggaa aagcggacat

20

<210> 110

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 110
ctggcttgga ggacagtgaa g 21
<210> 111

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 111
ccaagccctc cccatcccat gtat 24
<210> 112

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 112
gaggtgtcgt accgcgttct a 21
<210> 113

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 113
ccgttctgct cttccctgct t 21
<210> 114

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 114
ccagaccgc ttcactgacc tgc 23
<210> 115

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 115

cgctgtact tcagcatgga

20

<210> 116

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 116

gcgggtcagc tggaggaa

18

<210> 117

<211> 25

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 117

accccgaggc atcaccacaa atcat

25

<210> 118

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 118

agttctgcct ctctgacaac cat

23

<210> 119

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 119

taggctcaga gtcagaccca aac

23

<210> 120

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 120

ccctcgtggg cttgtgctcg g

21

<210> 121

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 121

aagccgccag ttcattctttt t

21

<210> 122

<211> 25

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 122

cttgtggttc aagtcaaag ttcag

25

<210> 123

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 123

tctgcctgcg ctctcgtcgg t 21
<210> 124

<211> 18
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 124
gggctgggca cctgactt 18
<210> 125

<211> 20
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 125
cccaacaagg gtcccagact 20
<210> 126

<211> 17
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 126
cggcgcattg agcggcg 17
<210> 127

<211> 20
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 127
cccaagggac ttcgtgaatg 20
<210> 128

<211> 21
<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 128

ggcgatccct gatgacaagt a

21

<210> 129

<211> 29

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer#

<400> 129

agcaccaact gtgaaccagg tacaatggc

29

<210> 130

<211> 19

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 130

gagggaggct ctgctttgg

19

<210> 131

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 131

tcacaactag cgggtgagga g

21

<210> 132

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 132
tgcagaggaa cggcgtgagc g 21
<210> 133

<211> 22

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 133
tgaggtttcc tcccaaatacg ta 22
<210> 134

<211> 22

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 134
cagctcaagg gaagctgtca tc 22
<210> 135

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 135
ccccacatg ttccccaaga tgct 24
<210> 136

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 136
ggaggcgcta aaggtctacg t 21
<210> 137

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 137

tgatgcttcg caggtcagta a

21

<210> 138

<211> 26

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 138

ctcctgcccc tcctaaagct gaagcc

26

<210> 139

<211> 17

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 139

ggacgcgtgg gcttttc

17

<210> 140

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 140

tgtggctgtg gacaccttc

20

<210> 141

<211> 25

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 141

ccacaagctg aaggcagaca aggcc

25

<210> 142

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 142

gcggattctc atggaacaca

20

<210> 143

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 143

ggtcagccag gagcttcttg

20

<210> 144

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 144

accaccttgc gcaggttgtc cag

23

<210> 145

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 145

cgcatgcacg acctgaac 18
<210> 146

<211> 23
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 146
gtctcgatct tggacagctt ctg 23
<210> 147

<211> 22
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 147
acactgtcca cacggcccga gg 22
<210> 148

<211> 21
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 148
ctgggcagaa tggaaggatc t 21
<210> 149

<211> 22
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 149
gggactctag cagacccaca ct 22
<210> 150

<211> 22
<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 150

cacccacctg gattccctgt tc

22

<210> 151

<211> 23

<212> DNA

<213> Artificial sequence ;

<220>

<223> PCR primer

<400> 151

ccttcagaca ggcgtagatg atg

23

<210> 152

<211> 29

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 152

gggtattatt tctttattag gtgccactt

29

<210> 153

<211> 30

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 153

ttccctaagg ctttcagtac ccaggatctg

30

<210> 154

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 154
ccagcttggc cctttcct 18
<210> 155

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 155
gaatgggtcg cttttgttct tag 23
<210> 156

<211> 22

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 156
tcacggacct cagcctgccc ct 22
<210> 157

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 157
tggtgaagggt gtcagccatg t 21
<210> 158

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 158
tcagagtgc gcaatggctt t 21
<210> 159

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 159

acctccttcc ccagctcccc

20

<210> 160

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 160

ggcaacatct tacttgtcct ttga

24

<210> 161

<211> 25

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 161

ccaaggaagc acagacaact atttc

25

<210> 162

<211> 30

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 162

tcctccctat ccatggcact aaaccacttc

30

<210> 163

<211> 19

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 163

tgggcaaggg ctcctatct

19

<210> 164

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 164

gttacccttg gcagacgtat g

21

<210> 165

<211> 31

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 165

tgcctctgag tctgaatctc ccaaagagag a

31

<210> 166

<211> 31

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 166

gagtagttat gtgattattt cagctcttga c

31

<210> 167

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 167

tcaaattgtg tccccgagtc t 21
<210> 168

<211> 34
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 168
cagaaattcg gaagacagaa ctattgtcat gcct 34
<210> 169

<211> 27
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 169
gattagtaac ccatagcagt tgaaggt 27
<210> 170

<211> 26
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 170
atttactgac ggtggtctga acatac 26
<210> 171

<211> 31
<212> DNA
<213> Artificial sequence

<220>

<223> PCR primer
<400> 171
tgacagactc caaatcacia gcacagtcaa c 31
<210> 172

<211> 25
<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 172

tgatgggttg gaggaagtt tat

25

<210> 173

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 173

tttgggtggg tcttagagg aatc

24

<210> 174

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 174

tgccaaccat gcatcaggta gccc

24

<210> 175

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 175

cagctcacct ggcaacttca

20

<210> 176

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 176
cctgattttc ccagcgatgt 20
<210> 177

<211> 19

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 177
cgccgctccc ggttctgct 19
<210> 178

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 178
tggccaagcg taagctgatt 20
<210> 179

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer
<400> 179
gctgcagtga tcggatcatc t 21
<210> 180

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> MLLT6
<400> 180
caccatggag cccatcgtgc tg 22
<210> 181

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> MLLT6 for

<400> 181

atccccgagg tgcaatttg

19

<210> 182

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> MLLT6 rev

<400> 182

agcgatcatg aggcacgtac t

21

<210> 183

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> ZNF144

<400> 183

cctgccagag ataggagacc cagacagct

29

<210> 184

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> ZNF144 for

<400> 184

atccccctga gccttttca

19

<210> 185

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> ZNF144 rev

<400> 185

cagcctctgg tcccaccat

19

<210> 186

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> PIP5K2B

<400> 186

tgatcatcaa ttccaaacct ctcccgaa

28

<210> 187

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> PIP5K2B for

<400> 187

ccccatggtg ttccgaaac

19

<210> 188

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> PIP5K2B rev

<400> 188

tgccaggagc ctccatacc

19

<210> 189

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> TEM7

<400> 189

cagccttcta aaacacaatg tattcatgt 29
<210> 190
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> TEM7 for
<400> 190
cctgaactta atggtagaat tcaaagatc 29
<210> 191
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> TEM7 rev
<400> 191
tattaacact gagaatccat gcagaga 27
<210> 192
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> ZNFN1A3
<400> 192
tatctggtct cagggattgc tcctatgtat tcagc 35
<210> 193
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> ZNFN1A3 for
<400> 193
cacagagccc tgctgaagtg 20
<210> 194
<211> 23
<212> DNA

<213> Artificial Sequence

<220>

<223> ZNFN1A3 rev

<400> 194

gcgaggtcat tggtttttag aaa

23

<210> 195

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> WIRE

<400> 195

ctgtgatccg aaatggtgcc ag

22

<210> 196

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> WIRE for

<400> 196

ccgtctccac atccaaacct

20

<210> 197

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> WIRE rev

<400> 197

acccatgcat tcggtatggt

20

<210> 198

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> PSMB3
<400> 198
agtggcacct gcgccgaaca a 21
<210> 199

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> PSMB3 for
<400> 199
ccccatgggtg actgatgact t 21
<210> 200

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> PSMB3 rev
<400> 200
ccagagggac tcacacattc c 21
<210> 201

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> MGC9753
<400> 201
ccagaaactt tccatcccaa aggcagtct 29
<210> 202

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> MGC9753 for
<400> 202
ctgccccaca ggaatagaat g 21
<210> 203

<211> 23

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> MGC9753 rev

<400> 203

aaaaatccag tctgcttcaa cca

<210> 204

23

<211> 20

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> ORMDL3

<400> 204

agctgccccca gctccacgga

<210> 205

20

<211> 21

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> ORMDL3 for

<400> 205

tccctgatga gcgtgcttat c

<210> 206

21

<211> 28

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> ORMDL3 rev

<400> 206

tctcagtact tattgattcc aaaaatcc

<210> 207

28

<211> 25

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> MGC15482

<400> 207

tccagtggaa gcaaccccag tgttc

25

<210> 208

<211> 25

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> MGC15482 for

<400> 208

cacttctaga gctaccgtgg agtct

25

<210> 209

<211> 22

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> MGC15482 rev

<400> 209

ccctcacttt gtaacccttg ct

22

<210> 210

<211> 20

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> PPP1R1B

<400> 210

cagcgtggcg caacaacca

20

<210> 211

<211> 21

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> PPP1R1B for

<400> 211

gggattgttt cgccacacat a 21
<210> 212

<211> 20
<212> DNA
<213> ARTIFICIAL SEQUENCE

<220>

<223> PPP1R1B rev
<400> 212
ccgatgttaa ggcccatagc 20
<210> , 213

<211> 27
<212> DNA
<213> ARTIFICIAL SEQUENCE

<220>

<223> MGC14832
<400> 213
taaaatgtcc ggccaacatg agttccc 27
<210> 214

<211> 17
<212> DNA
<213> ARTIFICIAL SEQUENCE

<220>

<223> MGC14832 for
<400> 214
cgcagtgcct ggcacat 17
<210> 215

<211> 20
<212> DNA
<213> ARTIFICIAL SEQUENCE

<220>

<223> MGC14832 rev
<400> 215
gacaccccct gacctatgga 20
<210> 216

<211> 25
<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> LOC51242

<400> 216

cagtgacctc tcccgttccc ttgga

25

<210> 217

<211> 20

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> LOC51242 for

<400> 217

tgggtccctg tgtcctcttc

20

<210> 218

<211> 20

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> LOC51242 for

<400> 218

agggtcagga gggagaaaac

20

<210> 219

<211> 26

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> FLJ20291

<400> 219

ccagtgccca cccgttaaag agtcaa

26

<210> 220

<211> 24

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> FLJ20291 for
<400> 220
ttgtgggaca ctcagtaact ttgg 24
<210> 221

<211> 20

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> FLJ20291 rev
<400> 221
acaagcactc ccaccgagat 20
<210> 222

<211> 24

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> PRO2521
<400> 222
agtctgtcct cactgccatc gccca 24
<210> 223

<211> 21

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> PRO2521 for
<400> 223
aagcctctgg gttttccctt t 21
<210> 224

<211> 20

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> PRO2521 rev
<400> 224
cccactggtg acaggatggt 20
<210> 225

<211> 23

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> LINK-GEFII

<400> 225

catctgacat ctttcccgtag

23

<210> 226

<211> 21

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> LINK-GEFII for

<400> 226

ctttgcacga tgtctcaacc a

21

<210> 227

<211> 18

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> LINK-GEFII rev

<400> 227

tttcccgtagg agcaggaa

18

<210> 228

<211> 26

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> CTEN

<400> 228

ccgccgccta atatgaaca ttaggg

26

<210> 229

<211> 23

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> CTEN for

<400> 229

cgagtattcc aaagctggta tcg

23

<210> 230

<211> 24

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<223> CTEN rev

<400> 230

atcacagaga gatggccctt atct

24

<210> 231

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S946 forward primer

<400> 231

acagtctatc aagcagaaaa atcct

25

<210> 232

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S946 reverse primer

<400> 232

tgccgtgccca gagaga

16

<210> 233

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1181 forward primer

<400> 233

gacaacagag cgagactccc 20
<210> 234

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1181 reverse primer
<400> 234
gcccagcctg tcacttattc 20
<210> 235

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2026 forward primer
<400> 235
tggtcattcg acaacgaa 18
<210> 236

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2026 reverse primer
<400> 236
cagcattgga tgcaatcc 18
<210> 237

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S838 forward primer
<400> 237
ctccagaatc cagaccatga 20
<210> 238

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S838 reverse primer

<400> 238

aggacagtgt gtagcccttc .

20

<210> 239

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S250 forward primer

<400> 239

ggaagaatca aatagacaat

20

<210> 240

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S250 reverse primer

<400> 240

gctggccata tatatattta aacc

24

<210> 241

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1818 forward primer

<400> 241

cataggtatg ttcagaaatg tga

23

<210> 242

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1818 reverse primer
<400> 242
tgcctactgg aaaccaga
<210> 243

18

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S614 forward primer
<400> 243
aaggggaagg ggctttcaaa gct
<210> 244

23

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S614 reverse primer
<220>

<221> misc_feature

<222> (1)..(1)

<223> n=a, c, g or t

<400> 244
nggaggttgc agtgagccaa gat
<210> 245

23

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2019 forward primer
<400> 245
caaaagctta tgatgctcaa acc
<210> 246

23

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2019 reverse primer

<400> 246

ttggtttccct ttgactttct ga

22

<210> 247

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S608 forward primer

<400> 247

taggttcacc tctcattttc ttcag

25

<210> 248

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S608 reverse primer

<220>

<221> misc_feature

<222> (17)..(17)

<223> n=a, c, g or t

<400> 248

gtctgggtct ttatggngct tgtg

24

<210> 249

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1655 forward primer

<400> 249

cggaccagag tgttccatgg

20

<210> 250

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1655 reverse primer

<400> 250

gcatacagca ccctctacct

20

<210> 251

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2147 forward primer

<400> 251

agggggagaat aaataaaatc tgtgg

25

<210> 252

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2147 reverse primer

<400> 252

caggagtgag acactctcca tg

22

<210> 253

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S754 forward primer

<400> 253

tggattcact gactcagcct gc

22

<210> 254

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S754 reverse primer
<400> 254
gcgtgtctgt ctccatgtgt gc 22
<210> 255

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1814 forward primer
<400> 255
tccccaatga cggatgatg 18
<210> 256

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1814 reverse primer
<400> 256
ctggagggtg gcttgtggat 20
<210> 257

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2007 forward primer
<400> 257
ggtcccacga atttgctg 18
<210> 258

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2007 reverse primer
<400> 258
ccacccagaa aaacaggaga 20
<210> 259

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1246 forward primer

<400> 259

tcgatctcct gaccttgtga

20

<210> 260

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1246 reverse primer

<400> 260

ttgtcacccc attgcctttc

20

<210> 261

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1979 forward primer

<400> 261

ccttgatag attcagctcc c.

21

<210> 262

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1979 reverse primer

<400> 262

cttgtccctt ctcaatcctc c

21

<210> 263

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1984 forward primer

<400> 263

ttaagcaagg ttttaattaa gctgc

25

<210> 264

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1984 reverse primer

<400> 264

gattacagtg ctccctctcc c

21

<210> 265

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> G11580 forward primer

<400> 265

ggttttaatt aagctgcatg gc

22

<210> 266

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> G11580 reverse primer

<400> 266

gattacagtg ctccctctcc c

21

<210> 267

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1867 forward primer

<400> 267

- 144 -

agtttgacac tgaggctttg 20
<210> 268
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> D17S1867 reverse primer
<400> 268
tttagacttg gtaactgccg 20
<210> 269
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> D17S1788 forward primer
<400> 269
tgcagatgcc taagaacttt tcag 24
<210> 270
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> D17S1788 reverse primer
<400> 270
gccatgatct cccaaagcc 19
<210> 271
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> D17S1836 forward primer
<400> 271
tcgaggttat ggtgagcc 18
<210> 272
<211> 24
<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1836 reverse primer

<400> 272

aaactgtgtg tgtcaaagga tact

24

<210> 273

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1787 forward primer

<400> 273

gctgatctga agccaatga

19

<210> 274

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1787 reverse primer

<400> 274

tacatgaagg catggtctg

19

<210> 275

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1660 forward primer

<400> 275

ctaatataat cctgggcaca tgg

23

<210> 276

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1660 reverse primer
<400> 276
gctgcggacc agacagat 18
<210> 277

<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> D17S2154 forward primer
<400> 277
gataaaaaca agcactggct cc 22
<210> 278

<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> D17S2154 reverse primer
<400> 278
cccacggctt tcttgatcta 20
<210> 279

<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> D17S1955 forward primer
<400> 279
tgtaatgtaa gcccacatgag g 21
<210> 280

<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> D17S1955 reverse primer
<400> 280
cactcaactc aacagtctaa aggtg 25
<210> 281

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2098 forward primer

<400> 281

gtgagttcaa gcatagtaat tatcc

25

<210> 282

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2098 reverse primer

<400> 282

attcagcctc agttcactgc ttc

23

<210> 283

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S518 forward primer

<400> 283

gatccagtgg agactcagag

20

<210> 284

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S518 reverse primer

<400> 284

tagtctctgg gacacccaga

20

<210> 285

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S518 forward primer

<400> 285

attcctgagt gtctaccctg ttgag

25

<210> 286

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S518 reverse primer

<400> 286

actgactgcg ccactgc

17

<210> 287

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D11S4358 forward primer

<400> 287

tcgagaagga caaaatcacc

20

<210> 288

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D11S4358 reverse primer

<400> 288

gaacagggtt agtccattcg

20

<210> 289

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S964 forward primer

<400> 289

gttcttttcct cttgtgggg 19
<210> 290

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S964 reverse primer
<400> 290
agtcagctga gattgtgcc 19
<210> 291

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D19S1091 forward primer
<400> 291
caagccaaga catcccagtt 20
<210> 292

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D19S1091 reverse primer
<400> 292
ccccacacac agctcatatg 20
<210> 293

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1179 forward primer
<400> 293
ttttctctct cattccattg gg 22
<210> 294

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1179 reverse primer

<400> 294

gcaacagagg gagactccaa

20

<210> 295

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> D10S2160 forward primer

<400> 295

tcccatoccg taagacctc

19

<210> 296

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> D10S2160 reverse primer

<400> 296

tatggagtac ctactctatg ccagg

25

<210> 297

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1230 forward primer

<400> 297

attcaaagct ggatcccttt

20

<210> 298

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1230 reverse primer
<400> 298
agctgtgaca aatgcctgta 20
<210> 299

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1338 forward primer
<400> 299
tcacctgaga ttgggagacc 20
<210> 300

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1338 reverse primer
<400> 300
aagatggggc aggaatgg 18
<210> 301

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2011 forward primer
<400> 301
tcactgtcct ccaagccag 19
<210> 302

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2011 reverse primer
<400> 302
aaacaccaca ctctcccctg 20
<210> 303

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2011 forward primer

<400> 303

ttcttgggct tcccgtagcc

20

<210> 304

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2011 reverse primer

<400> 304

ggggcagacg acttctcctt

20

<210> 305

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2038 forward primer

<400> 305

ggggatacaa ccttttaaagt tcc

23

<210> 306

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2038 reverse primer

<400> 306

attcacctaa tgaggattct tcttt

25

<210> 307

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2091 forward primer

<400> 307

gctgaaatag ccatcttgag ctac

24

<210> 308

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S2091 reverse primer

<400> 308

tccgcatacct ttttaagagg cac

23

<210> 309

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S649 forward primer

<400> 309

ctttcactct ttcagctgaa gagg

24

<210> 310

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S649 reverse primer

<400> 310

tgacgtgcta tttcctgttt tgtct

25

<210> 311

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1190 forward primer

<400> 311

gtttgttgct atgcctgc 18
 <210> 312

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> D17S1190 reverse primer

<400> 312
 caacacacta ccccagga 18
 <210> 313

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> M87506 forward primer

<400> 313
 actcctcatc tgtagggtct 20
 <210> 314

<211> 20

<212> DNA

<213> Artificial Sequence

<400> 314
 gagtccgcta cctgagtgtc 20
 <210> 315

<211> 4617

<212> DNA

<213> Homo sapiens

<400> 315
 gcctggagac taacagctgc tcggaagagg agctcagcag cccgggtcgc ggaggaggag 60
 ggggcggccg gcttctgctg cagccccag gccctgaatt acctccggtg cccttcccgc 120
 tgcaggactt ggtccctctg gggcgctga gtagaggga gcagcagcag cagcagcagc 180
 agcaacctcc cccgcccccg cctcctcccg ggccccctcg gccactcgcg ggtccttctc 240
 ggaagggtc cttcaaaatc cgcctcagtc gcctctttcg caccaagagc tgcaacggtg 300
 gctccggcgg tggggatggg accggcaaga ggcttcttg agagctggct gcttcagctg 360
 cgagcctgac agacatggga ggctctgcgg gccgggagct ggacgcgggg aggaaaccca 420
 agttgacaag aactcaaagt gccttttctc cggctctcct cagccccctg ttcacagggtg 480
 aaactgtgtc gcttgtggat gtggacattt ctacgcgggg cctgacctct ccacaccctc 540
 caactcccc tcctcctccg agaagaagcc tcagcctcct agatgatatc agtgggacgc 600
 tgctacatc tgtccttggt gctccgatgg ggtcttctc gcagtcttcc cccctacctc 660
 cgcctcctcc accccatgcc ccagatgcat ttccccggat tgctcccatc cgagcagctg 720

aatccctgca	cagccaaccc	ccacagcacc	tccagtgtcc	cctctaccgg	cctgactcga	780
gcagctttgc	agccagcctt	cgagagttgg	agaagtgtgg	ttggtattgg	gggccaatga	840
attgggaaga	tgacagatg	aagctgaaag	ggaaaccaga	tggttctttc	ctggtacgag	900
acagttctga	tcctcgttac	atcctgagcc	tcagtttccg	atcacagggt	atcaccacc	960
acactagaat	ggagcactac	agaggaacct	tcagcctgtg	gtgtcatccc	aagtttgagg	1020
accgctgtca	atctgttgta	gagtttatta	agagagccat	tatgcactcc	aagaatggaa	1080
agtttctcta	tttcttaaga	tccaggggtc	caggactgcc	accaactcct	gtccagctgc	1140
tctatccagt	gtcccgatcc	agcaatgtca	aatccctcca	gcacctttgc	agattccgga	1200
tacgacagct	cgtcaggata	gatcacatcc	cagatctccc	actgcctaaa	cctctgatct	1260
cttatatccg	aaagttctac	tactatgatc	ctcaggaaga	ggtataacct	tctctaaagg	1320
aagcgcagct	catttccaaa	cagaagcaag	agggtggaac	ctccacgtag	cgaggggctc	1380
cctgtctggtc	accaccaagg	gcatttgggt	gccaagctcc	agctttgaag	aaccaatta	1440
agctaccatg	aaaagaagag	gaaaagttag	ggaacaggaa	gggtgggatt	ctctgtgcag	1500
agactttggt	tccccacgca	gccctggggc	ttggaagaag	cacatgaccg	tactctgcgt	1560
ggggctccac	ctcacaccca	cccctgggca	tcttaggact	ggaggggctc	cttggaaaac	1620
tgggaagaag	ctcaacactg	tttctttttc	agaagttttg	tttttgatat	ttatattact	1680
tggtatggaa	aactcacctt	gaaggcagtt	ggggtttgtg	cccgttggat	tgaagtgggt	1740
gcgaagggtg	agcaggtcca	aagaagggtg	gggaggagg	aacaggggac	ggccattcag	1800
ctggtgccaa	aggcagagtt	agagtctgtg	ctgtgggcct	ggaagatggg	aggaggggct	1860
tgaggtttgc	aaaggactgg	gagttcctga	ggaaggggga	atctgcctct	tggtgccatg	1920
ggcagctgtt	gtaggagcag	gagagaaagg	agggtgggtg	gtctcgaaaa	gaatattggg	1980
caaaaacctag	ccaattggcc	ttagctggga	gaagttagtg	ctcctgcatc	cttttttaag	2040
gtttaggaac	ctgagttcag	aaacacctct	catggaagct	gtactagtgt	tgatttactt	2100
aattccttaa	gttccatgac	ctgaagttaa	ccccgttctt	cctctgctct	caaccatttg	2160
ccccttgaga	taactgtaca	tgctactctg	atcatggtaa	cagcatccct	attgcttctg	2220
ccagctgtca	tggcaatcgt	gtttcccatc	acctgggcgg	ttcagagcca	gtcatgggct	2280
gctgaattta	atggagcatg	tttccagggt	cttcatggca	aactgtactc	atgacttagg	2340
agttagtggt	acttccatgt	gcctgtcagc	ttgtgagggg	gaatgtggag	gaaggtgaga	2400
aatacagctc	ccacagttgt	gctcttccta	gaggaagctc	tcagaacgca	gccctcacgg	2460
gatttcctta	ggtcagagga	gagcatcgca	tctcacgttt	ttaggtttat	cactgccatc	2520
ccacttctgg	gatgggaggt	agcaagggtg	cttgtatttt	cctgtgttca	ttctagcaac	2580
ccagacattt	ccggatcaga	tcctgctggt	ctccactcac	tggaaaagtct	gccagatgcc	2640
gatttgagag	ctgcctgtcc	ctgctttcag	gaggagcggg	gagaaaaact	ccaatggctc	2700
ttaatgggtt	ctgcagctgg	ccatggccaa	ttcatatgac	attgtgagtt	tgctttctta	2760
tagagctgct	ctggggagag	gtttgctatt	gagatgtaac	agtggagctg	ttgggtcttc	2820
atgactcctt	tgctgtgtgt	ccatgggact	ctctttctgg	gttccccatg	cttatagtgt	2880
cctctgtgtca	caagacagat	actaatgtca	ggttttgtgg	ttcctgatgg	tttgggtggg	2940
gccccagtg	cctggtaatt	tataggactg	cctcatctgg	gagcattgcc	ttcttctcta	3000
gtcccacgtg	gagtgaccag	tcttccctct	tgtagctgaa	cagggaggaa	acttgaccac	3060
ttacctgact	gtggaagggt	ggcccacaag	atgagctgtg	caccataaac	acagcccacc	3120
tctgatttgt	catgtggtac	ctcttctttc	cttggcttcc	atggtagtat	taccaactaa	3180
gcaaatattgt	gatcccagaa	attggcttag	catgtagttg	ttgcctctgt	agagtacaag	3240
taatataact	cgccatcttg	caggaagtgc	caccccaata	tagagcctga	agttggaatc	3300
tggtgagatc	cttgggtggc	tgatatacag	cctgggatct	ttcttttttt	tgttcctttt	3360
caaccaccca	taattttaat	attatttttt	agtgtgtgtg	tgcttggtct	tgcgctagat	3420
attgtagaaa	acaaaaaagg	taaaagacgt	aatatgtggc	ctaaggagag	ttttagggtga	3480
ctgctgcaca	tcaagcagaa	aatcaaggac	tatctaaaaga	cgtttatagt	agataagatc	3540
agggttagacc	agatggtctg	ggaaagtctc	gtgcctctga	ggctttgggt	tgtagtcaat	3600
ggcaggacag	acagttagat	gaaaaacaca	tgagcaaaaag	caaggaagca	gaaatctgca	3660
tggcatgtac	tgaacagtgc	acagccctgt	tagagcaaca	tggttaaaga	atcctttcca	3720
tgctcggttt	ctagatggaa	gcttcccagc	caccaggcag	acctgagtgc	cgaggggtta	3780
tgatggtgag	gtggagccca	aagcccaaaag	gagtcagcaa	ggctcctgcc	cattgccagg	3840
gcctcactat	ggtcagctca	ggccatgtga	gggaggcaga	gcctccgcac	cccctgtgtt	3900
actgggggtt	cttctggaga	actcatacat	tcaggtacaa	aacaaaccaa	ctgaggagggt	3960
gtgacccaac	ctcaccaccc	acctttctcc	tcctggggag	tgctgtgttg	aactgtgtct	4020
gtgtcagtgc	actggtccca	gccctggccg	cagcctagtc	ctttctctgt	ggagtggtct	4080
gcaaaaacagc	agcgcaagag	gagacagtct	tcgtcaggtg	tgggtgtttg	gtgcctgcac	4140
gggtggcctt	gcacagagca	gttaggggaa	gatgaggggg	aggcatgggg	ctggggcagc	4200
tctctgggat	acagcctggt	cagagagtaa	atggagcaga	ggaacagggt	tggcagcacc	4260
tgcccttcac	ctccctgacc	aggcccgtcc	ctccttcgcc	agtgtgtgtc	agagctcatt	4320
taaatgtatt	cctttctagg	tctgggcgog	gtggctcacg	cctgtaatcc	cagcactttg	4380
ggaggcttag	gtgggtggat	catgaggtcg	ggagttcaag	accagcttgg	ccaaacagtg	4440
aaaccctatc	tctactaaaa	tacaaaaatt	agctgggcat	ggtggcatgc	gcctgtagt	4500
ccagctactt	gggaggctga	gacaggagaa	ttgcttgaac	ccaggaggcg	gaggttgac	4560
tgagccgaga	ttgcgccact	gccctctagc	ctagacgaca	gagttagact	ccatctc	4617

<210> 316

<211> 1713

<212> DNA

<213> Homo sapiens

<400> 316
gagcacgtgc gcgtcctcgc tgetcacatt tcggcggagg gcgcgctccc tggaaaattc 60
cactcctgtg ctagctccac cctatgcggc ttttctccta cccgacgctc ttcactctca 120
gctcccttcc cggcggcctt tgccgggaaca agatggcagc ccccatacct caaggggttct 180
cttgtttatc gaggggttttg ggctgggtgt ctcggcagcc agttctgggtg actcagtcgg 240
cagctatagt tccagtaaga actaaaaaac gtttcacacc tcctatttat caacctaaat 300
ttaaaacaga aaaggagtgt atgcaacatg cccggaaaagc aggattgggtt attcctccag 360
aaaaatcgga ccgttccata catctggcct gtacagctgg tatatttgat gcctatgttc 420
ctcctgaggg tgatgcacgc atatcatctc tttcaaggga gggactgata gagagaactg 480
aacgaatgaa gaagactatg gcatcacaaag tgtcaatccg gaggataaaa gactatgatg 540
ccaactttaa aataaaggac ttccctgaaa aagctaagga tatctttatt gaagctcacc 600
tttgtctaaa taactcagac catgaccgac ttcataacct ggtaactgaa cactgttttc 660
cagacatgac ttgggacatc aaatataaga ccgtccgctg gagctttgtg gaatcttttag 720
agccctctca tgttgttcaa gttcgtgtgt caagtatgat gaaccagggc aacgtgtacg 780
gccagatcac cgtacgcacg cacaccgggc agactctggc catctatgac cggtttgccc 840
ggttgatgta tggacaggaa gatgtaccga aggatgtcct ggagtatgtt gtattcgaag 900
agcagttgac aaacccctat ggaagctgga gaatgcatac caagatcgtt ccccatggg 960
caccctctaa gcagcccatc cttaagacgg tgatgatccc tggccctcag ctgaaaccag 1020
aagaagaata tgaagaggca caaggagagg ccagaaagcc tcagctagcc tgatgacaaa 1080
aatgacttct aggggtgaagc ctgggtgatg aggtgctgg aagctttgaa gtctcccat 1140
ccctcatgc tataaaaaga actacctttg ttctctcca tcctgctcag gtcttttcag 1200
cagtctcatc atcagcaacc atgactgatg actgggccct agcagggtggc aggtataaca 1260
tggccatgga cactcttctt ttttaattt tatgtctagc ttctgagctt agatgaaaga 1320
cagtatgttt cagagaacat tggatatcag ttttccac agcagggact gtgagagaca 1380
accagcagca tcctctttgt aatcacaggc cagggatcag agtttgaaat gaaatgttgt 1440
cagggtgttg gaaaaatttt ggtgagttct gcacatttcc cctgggtcag gctgggcatg 1500
gaccagcctt cagatggcag aagtggaaag tgagcctact tgtgagcgat gtgactttta 1560
ggaaatgaag actggggaag aataattagt gtttataaga catttaagag gccctttttc 1620
atatactgac tcactgatga atcagcatct gcattttatg gaaaaatata aatccaaaga 1680
aataatttat cccttaaaaa aaaaaaaaaa aaa 1713

<210> 317

<211> 5632

<212> DNA

<213> Homo sapiens

<400> 317
gtggcgatca tggcaagtta gaagttttct gactcctttc ggaggagcct ccgggacccc 60
ggggagtaac aggtgtctgg aggtgaagg gtggaggggt tcctggattt gggttttgct 120
tgtgaaactc cctccacccc tcctctctcg caccacacca cccctcacc cccttctttt 180
tccgtccttg gaaaatggtg tccaagctca cgtcgtcca gcaagaactc ctgagcgccc 240
tgctgagctc cggggtcacc aaggaggtgc tggttcaggc cttggaggag ttgtgccat 300
ccccgaactt cggggtgaag ctggagacgc tgcccctgtc ccctggcagc ggggcccagc 360
ccgacaccaa gccggtcttc catactctca ccaacggcca cgccaagggc cgcttgtccg 420
gcgacgaggg ctccgaggac ggcgacgact atgacacacc tcccatcctc aaggagctgc 480
agggcgtcaa caccgaggag gcggcggagc agcggcgga ggtggaccgg atgctcagtg 540
aggacccttg gagggctgct aaaatgatca agggttacat gcagcaacac aacatcccc 600
agagggaggt ggtcgtatgc accggcctga accagtgcga cctctcccag catctcaaca 660
agggcaccoc tatgaagacc cagaagcgtg ccgctctgta cacctggtac gtcagaaagc 720
aacgagagat cctccgacaa ttcaaccaga cagtccagag ttctggaaat atgacagaca 780
aaagcagtcg gcatcagctg ctgtttctct tccagagtt cagtcaacag agccatgggc 840
ctgggcagtc cgatgatgcc tgcctctgag ccaccaaca gaagatgcgc cgcaaccggg 900
tcaaatgggg gcccgctgcc cagcaaatct tgtaccaggc ctacgatcgg caaaagaacc 960

ccagcaagga	agagagagag	gccttagtgg	aggaatgcaa	cagggcagaa	tgtttgcagc	1020
gaggggtgtc	cccctccaaa	gcccacggcc	tgggctccaa	cttgggtcact	gaggtccgtg	1080
tctacaactg	gtttgcaaac	cgcaggaagg	aggaggcatt	ccggcaaaag	ctggccatgg	1140
acgcctatag	ctccaaccag	actcacagcc	tgaacctctt	gctctccccc	ggctccccc	1200
accaccagcc	cagctcctct	cctccaaaaca	agctgtcagg	agtgcgttac	agccagcagg	1260
gaaacaatga	gatcacttcc	tctcaacaa	tcagtaccca	tggcaacagc	gccatggtga	1320
ccagccagtc	ggttttacag	caagtctccc	cagccagcct	ggaccacagg	cacaatctcc	1380
tctcacctga	tggtaaaatg	atctcagttc	caggaggagg	tttgccccc	gtcagcacct	1440
tgaccgaatg	ccacagcctc	tcccaccata	atccccagca	atctcaaaac	ctcatcatga	1500
caccctctct	tggagtcatg	gcaattgcac	aaagcctcaa	cacctcccaa	gcacagagtg	1560
tccctgtcat	caacagtgtg	gccggcagcc	tggcagccct	gcagcccgtc	cagttctccc	1620
agcagctgca	cagccctcac	cagcagcccc	tcatgcagca	gagccacagg	agccacatgg	1680
cccagcagcc	cttcatggca	gctgtgactc	agctgcagaa	ctcacacatg	tacgcacaca	1740
agcaggaacc	ccccagtat	tcccacacct	cccgggttcc	atctgcaatg	gtgggtcacag	1800
ataccagcag	catcagtaca	ctcaccaaca	tgtcttcaag	taaacagtg	cctctacaag	1860
cctggtgatg	cccacacacc	acttacttcg	tgcgcaacaa	caaggacct	gttttccaca	1920
ccatcacctc	ctgggcagct	gtcatggaaa	agcccagtg	cctgaccagc	acctgcgaga	1980
ggtccctgct	tacctgacgg	acgtcctgct	ggcacctcag	acaatccact	ctcaggagcg	2040
cagccgaag	cccagtttcc	cttctatgca	gtattgccac	aatgcctctc	ccacgatgtc	2100
aaggactcct	gtctgtcctg	gaggtgggag	acaaggaaac	tccgaagagg	aagcaagaaa	2160
gccgtactgt	ctatgtttgt	atccttcac	gaacaaactg	atgcgaaaac	ttgaatctgt	2220
tactgaaatg	aggagagaag	gacatgtgct	attgaactga	gccaaacaca	ctgtaaatat	2280
ccacagactc	cctcccctgc	ccccatccca	aatgatcttg	agatttcttt	taaagaagta	2340
aatttgtcca	atggctgtaa	actataaact	actgtaatta	agtgaatttt	cccctctgtg	2400
tcctctcccc	tctgccctgt	atataatact	aaagtgtcta	ttagttttct	ttgtaaagg	2460
cagagtcaaa	atttcaaaag	tgatctgtcc	cctctccctc	catggagaaa	catcctaagt	2520
gggaagtga	gccccttgct	ctctcccgcg	aggcctggac	acttatgggg	acagcatacc	2580
ttggactgac	taccagctaa	ctccagtctc	ctgacattaa	gacacacctc	tggatccctg	2640
gaggggctga	atgtagtgtg	tcagagtaac	atggcagctt	cctgtggggc	aggagctcag	2700
ccgtgactgc	cctaagaaac	cccagggcag	ggaaactggc	tgtttgatag	cagaagaaaa	2760
agttgcagtc	tcagaaagcc	ttccattaaa	acaatttatt	ttatcactaa	aaaaaagtgg	2820
cgatcatggc	aagttagaag	ttttctgact	cctttcggag	gagcctccgg	gaccccgggg	2880
agtaacaggt	gtctggaggg	tgaagggtgg	aggggttcc	ggatttgggt	tttgcttgtg	2940
aaactcccc	ccacctcct	ctctcgacc	caccaccccc	ctcaccctct	tcttttccg	3000
tccttggaaa	atggtgtcca	agctcacgtc	gctccagcaa	gaactcctga	gcgcccgtgt	3060
gagctccggg	gtcaccaagg	aggtgctggt	tcaggccttg	gaggagtgtg	tgccatcccc	3120
gaacttcggg	gtgaagctgg	agacgctgcc	cctgtccctc	ggcagcgggg	ccgagcccg	3180
caccaagccg	gtcttccata	ctctcaccaa	cggccacggc	aagggcgct	tgtccggcga	3240
cgagggtccc	gaggacggcg	acgactatga	cacacctccc	atcctcaagg	agctgcaggc	3300
gctcaacacc	gaggagggcg	cggagcagcg	ggcgagggtg	gaccggatgc	tcagttagga	3360
cccttgaggg	gctgctaaaa	tgatcaaggg	ttacatgcag	caacacaaca	tccccagag	3420
ggaggtggtc	gatgtcaccg	gcctgaacca	gtcgcacctc	tcccagcatc	tcaacaagg	3480
cacccttatg	aagaccaga	agcgtgccgc	tctgtacacc	tggtacgtca	gaaagcaacg	3540
agagatcctc	cgacaattca	accagacagt	ccagagttct	ggaaatatga	cgacaaaaag	3600
cagtcaggat	cagctgctgt	ttctctttcc	agagttcagt	caacagagcc	atgggcttgg	3660
gcagtccgat	gatgctgtct	ctgagccccc	caacaagaag	atgcgcccga	accggttcaa	3720
atgggggccc	gcgtcccagc	aaatcttgta	ccaggcctac	gatcggcaaa	agaaccccag	3780
caaggaagag	agagaggcct	tagtggagga	atgcaacagg	gcagaatgtt	tgacgcagg	3840
ggtgtcccc	tccaaagccc	acggcctggg	ctccaacttg	gtcactgagg	tccgtgtcta	3900
caactgggtt	gcaaaccgca	ggaaggagga	ggcattccgg	caaaagctgg	ccatggacgc	3960
ctatagctcc	aaccagactc	acagcctgaa	ccctctgtct	tcccacggct	ccccccacca	4020
ccagcccagc	tcctctcctc	caaacaagct	gtcaggagtg	cgctacagcc	agcagggaaa	4080
caatgagatc	acttctcct	caacaatcag	tcaccatggc	aacagcgcca	tggtgaccag	4140
ccagtgggtt	ttacagcaag	tctccccagc	cagcctggac	ccaggccaca	atctcctctc	4200
acctgatggg	aaaatgatct	cagttctcag	aggaggtttg	ccccagtgca	gcaccttgac	4260
gaatatccac	agcctctccc	accataatcc	ccagcaatct	caaaacctca	tcatgacacc	4320
cctctctgga	gtcatggcaa	ttgcacaaag	cctcaacacc	tcccagcac	agagtgtccc	4380
tgatcatcaac	agtgtggccg	gcagcctggc	agccctgcag	ccgtccagt	tctcccagca	4440
gctgcacagc	cctcaccagc	agccctcat	gcagcagagc	ccaggcagcc	acatggccca	4500
gcagcccttc	atggcagctg	tgactcagct	gcagaaactc	cacatgtacg	cacacaagca	4560
ggaaccccc	cagtattccc	acacctcccg	gtttccatct	gcaatgggtg	tcacagatac	4620
cagcagcatc	agtacactca	ccaacatgtc	ttcaagtaaa	cagtgtcctc	tacaagcctg	4680
gtgatgccc	cacaccactt	acttcgtggc	caacaacaag	gacctgttt	tccacaccat	4740
caccctctgg	gcagctgtca	tggaaaagcc	cagtgaacct	accagcacct	gcgagaggtc	4800
cctgcttacc	tgacggacgt	ctgctgggca	cctcagacaa	tccactctca	ggagcgcagc	4860
ccgaagccca	gtttcccttc	tatgcagtat	tgccacaatg	cctctccccc	gatgtcaagg	4920

actcctgtct	gtcctggagg	tgggagacaa	ggaacctccg	aagaggaagc	aagaaagccg	4980
tactgtctat	gttgtgatcc	ttcatcgaac	aaactgatgc	gaaaacttga	atctgttact	5040
gaaatgagga	gagaaggaca	tgtgtctattg	aactgagcca	aacacactgt	aaatatccac	5100
agactccctc	ccctgcccc	atcccaaatg	atcttgagat	ttctttttaa	gaagtaaatt	5160
tgtccaatgg	ctgtaaaacta	taaactactg	taattaagtg	caatttcccc	tctgtgtcct	5220
ctccctctcg	ccctgtatat	aataactaaag	tgtctatttag	ttttctttgt	aaagggtcaga	5280
gtcaaaattt	caaaagtgat	ctgtcccctc	tcccctcatg	gagaaacatc	ctaagtggga	5340
agtgaagccc	cttgtcctct	cccgcgaggc	ctggacactt	atggggacag	cataccttgg	5400
actgactacc	agctaactcc	agtctcctga	cattaagaca	cacctctgga	tccctggagg	5460
ggctgaatgt	agtgtgtcag	agtaacatgc	cagcttcctg	tgggccagga	gctcagccgt	5520
gcactcccta	agaaacccca	gggcagggaa	actggctgtt	tgatagcaga	agaaaaagtt	5580
gcagtctcag	aaagccttcc	attaaaacaa	tttattttat	cactaaaaaa	aa	5632

<210> 318

<211> 3123

<212> DNA

<213> Homo sapiens

<400> 318						
gaactgtggc	gctttctggg	taaagatgga	cgctccagat	ctcttttcgcc	ggctcggcgc	60
gggggcca	ttcgacacga	gacgcttctc	ggcagacgca	gctcgaattcc	agataggaaa	120
aaggaaatat	gactttgatt	cttcggaggt	gcttcagggg	ctggactttt	ttggaaacaa	180
gaagtctgtc	ccaggtgtgt	gtggagcatc	acaaacacat	cagaagcccc	aaaatggaga	240
gaaaaaagaa	gagagcctaa	ctgaaaaggaa	gagggagcag	agcaagaaaa	aaaggaagac	300
gatgacttca	gagacagggt	ttcaccatgt	tggccagtat	ggctctcgatc	tcctgacctc	360
gtgattccac	caccttgggc	tcccaaagtg	ctgggattac	agatgtgagc	caccacgccc	420
agccagaaat	tgcttcccaa	gaagaagggtg	ctactataca	gtggatgtca	tctgtagaag	480
caaagattga	agacaaaaaa	gttcagagag	aaagtaaact	aacttccgga	aagttggaga	540
atctcagaaa	agaaaaagata	aacttcttgc	ggaataaaca	caaaattcac	gtccaaggaa	600
ccgatcttcc	tgacccaatt	gctacatttc	agcaacttga	ccaggaatat	aaaatcaatt	660
ctcgactact	tcagaacatt	ctagatgcag	gcttccaaat	gcctacgcca	atccaaatgc	720
aagccatccc	agttatgctg	catggtcggg	aacttctggc	ttctgtctca	actggatctg	780
gaaaaacatt	agcttttagc	attcctattt	taatgcagct	gaaacaaccc	gcaaataaag	840
gcttcagagc	cctgattata	tcaccaacac	gagaacttgc	cagccagatt	cacagagagt	900
taataaaaaa	ttctgaggga	acaggattca	gaatacacat	gatccacaaa	gcagcagtg	960
cagcaagaa	atttggacct	aaatcatcta	aaaagtttga	tattcttgtg	actactccaa	1020
atcgactaat	ctatttatta	aagcaagatc	cccccggaat	cgacctagca	agtgttgagt	1080
ggcttgtagt	agacgaatca	gataaactgt	ttgaagatgg	caaaactggg	ttcagagacc	1140
agctggcttc	cattttctctg	gcctgcacat	cccacaaggt	ccgaagagct	atgttcagtg	1200
caacttttgc	atatgatgtt	gaacagtggg	gcaaactcaa	cctggacaat	gtcatcagtg	1260
tgtcatttgg	agcaaggaat	tctgcagtag	aaactgtaga	acaagagctt	ctcttctgtg	1320
gatctgagac	cggaaaactt	ctggccgtga	gagaacttgt	taaaaagggt	ttcaatccac	1380
ctgttcttgt	ttttgttcag	tccattgaaa	gggctaaaga	actttttcat	gagctcatat	1440
atgaagggtat	taatgtggat	gttattcatg	cagagagaac	acaacaacag	agagataaca	1500
cagtccacag	tttcagagca	ggaaaaatct	gggttctgat	ttgtacagcc	ttgctagcaa	1560
gagggattga	ttttaaagggt	gtgaacttgg	tgatcaacta	tgactttcca	actagctcag	1620
tggaaatat	ccacaggata	ggtcgaactg	gaagagcagg	gaataaggga	aaagcaatta	1680
catttttccac	tgaggatgat	aagccattat	taagaagcgt	tgctaattgt	atacagcagg	1740
ctgggtgtcc	tgtaccagaa	tacataaaaag	gttttcagaa	actactaagc	aaacaaaaga	1800
aaaagatgat	taagaaaacca	ttggaaagggt	agagcattag	tacaactcca	aaatgtttct	1860
tagaaaaagc	taaggataaa	cagagaaagg	tcactggtca	gaacagcaag	aagaaagtag	1920
ctcttgaaga	caaaaagttaa	aaacagactt	taaaaatact	gtcccagaaa	tgtaatttta	1980
tgatcccagc	atgaatgtta	ttttcatgga	atacttgaag	tcttacagtc	acctgtacca	2040
aacatttgaa	atcaactaca	agtacatggg	actggtgata	aatgatccta	aactatcaag	2100
tcagtttcaa	tttgtagggtg	cctttttttt	ttcctgtaga	gatgaggggtc	ttgccatgtt	2160
gtccaggatg	gtcctgaact	cctgacctca	cacaactctc	ctgccttagc	ctcctgagta	2220
actgagatta	caggcacaaag	ctgctgcacc	cagctctgta	gggtgactttt	aaatgattat	2280
acaatggaaa	taacattcat	tgacatttct	gtggtttgaa	tccagggaga	tacttcttat	2340
agaaaaacaa	atgtttatgc	taaaaaataac	accaaattgt	ggtgaactct	taaggacttt	2400
tcctttcaag	tgtgaaggaa	ggtgtgatga	atgctgtgga	gaggcatctg	gaacagaaat	2460
tcaaaaataa	gccttgacat	taaatacccc	ttccactgct	cactttgtgg	atggtagcat	2520
gagctgtcta	ccaagaagaa	acctgctgct	ctcttaattt	taatatattcc	taatttgttg	2580

atggcctttt	gtgttgtgaa	ccacaacaaa	gagaggcctc	ttttgtggct	ggttattcca	2640
gttccctggg	attttaaatt	ctttggtcta	ttaagtatcc	ttgtattgga	tacgtaatac	2700
cttagtgctg	tcataatggt	gcacaagatc	atgatcagct	tctccctttc	ttcattttct	2760
gtgatttaac	catgttcttt	cctgtctctt	tccatttaag	atattttatt	tgaatactga	2820
taaacatttt	atcctgataa	ggaagaatgt	tcttggtact	tgatatacct	ctgtcttcat	2880
tctcttacag	cttatctttc	cttaggttga	tgggtgcctca	tttaataagt	agatctctac	2940
ttaagctaaa	ggattatgat	catatggtgt	tggagactat	tagctattag	atttttctca	3000
aaatatgagt	tttgtacaat	ggaatgaaaa	agtgacttca	tatacgtaag	actggtgcct	3060
aagaatgact	tgaatgttat	cagtactacc	acagaactat	aatatacatt	gcctttttctc	3120
agc						3123

<210> 319

<211> 1817

<212> DNA

<213> Homo sapiens

<400> 319						
caaccatcct	gaagctacag	gtgctccctc	ctggaatctc	caatggattt	cagtcgcaga	60
agcttccaca	gaagcctgag	ctcctccctg	cagggcccctg	tagtcagtac	agtgggcatg	120
cagcgccctcg	ggacgcaccc	cagcgtttat	gggggtgctg	gaggccgggg	catccgcac	180
tccaactcca	gacacacggt	gaactatggg	agcgatctca	caggcggcgg	ggacctgttt	240
gttggcaatg	agaaaatggc	catgcagaac	ctaaatgacc	gtctagcgag	ctacctagaa	300
aagggtgcgga	ccctggagca	gtccaactcc	aaacttgaag	tgcaaatcaa	gcagtgggtac	360
gaaaccaacg	ccccgagggc	tggtcgcgac	tacagtgcac	attacagaca	aattgaagag	420
ctgcgaagtc	agattaagga	tgctcaactg	caaaatgctc	ggtgtgtcct	gcaaattgat	480
aatgctaaac	tggctgctga	ggacttcaga	ctgaagtatg	agactgagag	aggaatacgt	540
ctaacagtg	aagctgatct	ccaaggcctg	aataaggtct	ttgatgacct	aaccctacat	600
aaaacagatt	tggagattca	aattgaagaa	ctgaataaag	acctagctct	cctcaaaaag	660
gagcatcagg	aggaagtcga	tggcctacac	aagcatctgg	gcaacactgt	caatgtggag	720
gttgatgctg	ctccaggcct	gaaccttggc	gtcatcatga	atgaaatgag	gcagaagtat	780
gaagtcattg	cccagaagaa	ccttcaagag	gccaaaagaa	agtttgagag	acagactgca	840
gttctgcagc	aacaggtcac	agtgaatact	gaagaattaa	aaggaactga	ggttcaacta	900
acggagctga	gacgcacctc	ccagagcctt	gagatagaac	tccagtocca	tctcagcatg	960
aaagagtctt	tggagcacac	tctagaggag	accaaggccc	gttacagcag	ccagttagcc	1020
aacctccagt	cgctgttgag	ctctctggag	gcccactga	tgagattcg	gagtaacatg	1080
gaacgcagga	acaacgaata	ccatatcctt	cttgacataa	agactcgact	tgaacaggaa	1140
attgtacttt	accgcccctt	tctggaagga	gaagacgtaa	aaactacaga	atatcagtta	1200
agcaccctgg	aagagagaga	tataaagaaa	accaggaaga	ttaagacagt	cgtgcaagaa	1260
gtagtggatg	gcaagggtcgt	gtcatctgaa	gtcaaagagg	tggaaagaaa	tatctaaata	1320
gctaccagaa	ggagatgctg	ctgaggtttt	gaaagaaatt	tggctataat	cttatctttg	1380
ctccctgcaa	gaaatcagcc	ataagaaagc	actattaata	ctctgcagtg	attgaagggg	1440
gtggggtggc	gggaatccta	tttatcagac	tctgtaatg	aatataaatg	ttttactcag	1500
aggagctgca	aattgcctgc	aaaaatgaaa	tccagtgaag	actagaatat	ttaaaaatc	1560
attactgcca	tctttatcat	gaagcacatc	aattacaagc	tgtagaccac	ctaataatca	1620
tttgtaggta	atgttctctg	aaattgcaat	acatttcaat	tataactaac	ctcacaaagt	1680
agaggaaatcc	atgtaaattg	caaataaacc	acttttcta	tttttctctg	ttctgaaaaa	1740
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1800
aaaaaaaaaa	aaaaaaa					1817

<210> 320

<211> 1474

<212> DNA

<213> Homo sapiens

<400> 320						
ggcagatgaa	atataagatt	catcaaccac	atgtgacagc	ccatggcagg	tttctgtttt	60
tccatcgctc	ctctgcagg	cacagacaca	cagagcccag	ccgtggcagg	ctcagccggg	120
gtccggggct	gctaacaacg	gctacattcc	tccccagg	ccaaggga	tcctgagcgc	180

```

aggccagggt  tgtttggttt  tgaggtgtgc  tgggatgaaa  ggcaccctgg  aagtggaagg  240
ttcgggtcatt  cattaattaa  ttacatctat  aattgagggt  ttgttcttaa  gagcgagtcc  300
tttgaaagta  ctttccttca  aacagtgact  gccacaaagg  catcagatat  tcaccacctt  360
ctcggctgcc  tcagcacagc  aagctttatt  ctgggacctg  agatcctgtt  ctgagctggc  420
tttcccttct  ccaggctcgc  tcaccctccc  tttagagata  gtggatggta  agatgaccaa  480
tgctcagatt  attcttctca  ttgacaatgc  caggatggca  gtggatgact  tcaacctcaa  540
gaaatggaga  agcatcatgt  gccaaagtac  ttcaatgtca  atgtgaagg  ggatacagg  600
cccagggaag  atctgattaa  ggtcctggag  gatagagac  aagaatatga  gcttataata  660
aagaagaagc  atcgagactt  ggacacttgg  tataaagaac  agtctgcagc  catgtcccag  720
gaggcagcca  gtccagccac  tgtgcagagc  agacaagggt  acatccacga  actgaagcgc  780
acattccagg  ccttgagat  tgacctgcag  acacagtaca  gcacgaaatc  tgctttggaa  840
aacatgttat  ccgagaccca  gtctcggtac  tcctgcaagc  tccaggacat  gcaagagatc  900
atctcccact  atgaggagga  actgacgcag  ctacgccatg  aactggagcg  gcagaacaat  960
gaataccaag  tgctgctggg  catcaaaacc  cacctggaga  aggaaatcac  cactgaccga  1020
cggctcctgg  agggagagag  tgaagggaca  cgggaagaat  caaagtcgag  catgaaagtg  1080
tctgcaactc  caaagatcaa  ggccataacc  caggagacca  tcaacggaag  attagtctct  1140
tgtcaagtga  atgaaatcca  aaagcacgca  tgagaccaat  gaaagtttcc  gcctgttgta  1200
aaatctatct  tcccccaagg  aaagtccttg  cacagacacc  agtgagttag  ttctaaaaga  1260
tacccttgga  attatcagac  tcagaaaact  ttattttttt  tttctgtaac  agtctcacca  1320
gacttctcat  aatgctctta  atatattgca  cttttcta  caaagtgcga  gtttatgagg  1380
gtaaagctct  actttcctac  tgcagccttc  agattctcat  cattttgcat  ctattttgta  1440
gccaataaaa  ctccgcacta  gcaaaaaaaa  aaaa  1474
<210> 321

```

<211> 754

<212> DNA

<213> Homo sapiens

```

<400> 321
caatcaaaacc  cataaataacc  acagactcta  atagccatgg  attgctgtgc  ctctcgaggc  60
tgcagtgtcc  ccaccggggc  tgccaccacc  atctgtcct  ctgacaaatc  ctgccgctgt  120
ggagtctgcc  tgcccagcac  ctgcccacac  acagtttggt  tactggagcc  cactgtctgt  180
gacaactgtc  ccccaccctg  ccacattcct  cagccctgcg  tgcccacctg  cttcctgtct  240
aactcctgcc  agccaactcc  aggctggag  accctcaacc  tcaccacctt  cactcagccc  300
tgctgtgagc  cctgcctccc  aagaggctgc  taatggatgg  ctactttgct  cagtgcctga  360
gattgaaaaa  gtcaacatag  aagcttttag  attcacctat  ctcagtacct  acaactaatg  420
tactctgctt  tagaaattgg  aacaaggatg  gtactaccac  aatcaccccc  tgcaaaaaaa  480
aagagaccaa  gaaactttca  atgaccattc  agctataacc  aactgcagtt  tgaatcagtg  540
gatgcctata  gcttcctgaa  gctgttcgat  tccttcatat  taaagtgtct  ctttctgttg  600
gtgggtttgg  aattctgttt  tcagtcttgg  gtgggtatct  tctgaaaatt  aaggaaagtt  660
ttcatgatta  tcctaataaa  tttttacatc  ctggcatagc  acaaaaaaaa  aaaaaaaaaa  720
aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaa  754
<210> 322

```

<211> 749

<212> DNA

<213> Homo sapiens

```

<400> 322
aagaactga  aagctaacca  gacgcccatt  gccatggatt  gctgtgcctc  tcgcagctgc  60
agtgtcccca  ctgggcctgc  caccaccatc  tgctcctccg  acaaatcctg  ccgtgtgga  120
gtctgcctgc  ccagcacctg  cccacacaca  gtttggttac  tggagcccat  ctgctgtgac  180
aactgtcccc  caccctgcc  cattcctcag  ccctgcgtgc  ccacctgctt  cctgctcaac  240
tcctgccagc  caactccggg  cctggagacc  ctcaacctca  ccaccttcac  tcagccctgc  300
tgtgagccct  gcctcccaag  aggctgctga  tgcatggcta  ctttgctcag  tgcccgacaa  360
cgaagaatcc  agaagctgtc  ccttcagtat  tcacttgctt  cagtagtttg  ccagatgtta  420
aggtagacca  gatgaccag  atatgaagaa  cttacctttg  gttttaatgg  gggaaaaaaa  480
gaaaagtatt  ttttatggtt  atttagctga  aaaaccattt  ggctcctgtg  ggcagggtgaa  540

```

tgagttttat	tagcaaaata	ctgtttcaat	ctttaagacc	tcagattaca	tgttcttgat	600
catattgctt	cctggctctt	gtttcttgta	ctgggtatct	tcatagaaga	aaatttcttg	660
gtgggttttc	caataaacta	tatttctctg	gcaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	720
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa				749

<210> 323

<211> 440

<212> DNA

<213> Homo sapiens

<400> 323						
gtgttccctg	agataggtgg	atataaaaga	cccatagagg	acaaccttgt	agaagaaagc	60
cttcctttgc	cacaaaacat	tgtcctgggc	cactgtcact	atgtcttgct	gtgattccta	120
tctccaagga	tgtgcagcgc	tccccactgg	cctggccacc	actatctgcc	cctctgacat	180
aagctgtcaa	tgtgaagtct	gcctaccagc	cacctgtcct	catgagatca	gcctccttca	240
gcccacctgc	tgtgaacctg	gccccctgct	ggctgcatgc	ctgactccta	tgtgccatcc	300
tgttgactgc	tcaacaaatg	ccaccagctc	ccaacctga	gcgggctctc	tgtcaccacc	360
tgcattccaga	gtgtgaacca	ccttgctgct	agccaaagag	cttgcccaca	ttaccttgag	420
gaccttcagt	agtcatttaag					440

<210> 324

<211> 614

<212> DNA

<213> Homo sapiens

<400> 324						
agacttctct	caactcaaca	aaaaccacc	tcccattgcc	atgtattgct	gtgctctccg	60
ctctcgcagc	gtccccaccg	gccctgccac	cacctctctc	tcatttgata	aaagctgccg	120
ctgtggagtc	tgcctacca	gcacctgccc	acatgagatc	agcctccttc	agcccatctg	180
ctgtgacacc	tgccccccac	cctgctgcaa	gcctgatacc	tatgtgcaa	cctgctggct	240
gctcaacaac	tgtcaccgga	ctccccgact	gagtgggac	aacctgacca	cctatgttca	300
gcctggctgt	gagagtccct	gtgagcccg	ctgttaacca	gccgagtctg	cacaggttcc	360
gtgaggtggc	tgcccaatgt	cctctgcacc	atctgggctt	cagcactcac	tactgcctac	420
atcaaggcta	aggccatccc	aatccccggg	gccaaagtct	gatgaatctt	cttaattatt	480
tgcacatttg	ggtaccattg	gagacctccc	ttctgtcttt	taggctatct	catcactctt	540
tgagaaataa	ccattttgac	catttggtta	taaactttat	tctggcttag	caaaaaaaaaa	600
aaaaaaaaaa	aaaa					614

<210> 325

<211> 1193

<212> DNA

<213> Homo sapiens

<400> 325						
cagaaactcc	tccaagcaac	ctaactctta	acccaacttc	tgacaccatg	acctgctgcc	60
agaccagctt	ctgtggatat	cccagcttct	ccatcagtgg	gacctgtggc	tccagctgct	120
gccagccaag	ctgctgtgag	accagctgct	gccagccaag	cagctgccag	actagcttct	180
gcggatttcc	cagcttctca	accagtggga	cctgcagctc	cagttgctgc	cagccaagct	240
gctgtgagac	cagctgctgc	cagccaagct	gctgtgagac	cagctgctgc	cagccaagct	300
gctgccagat	cagctcctgc	ggaactggct	gtggcattgg	tggtggcatc	agctatggcc	360
aggagggcag	cagtggagct	gtgagcacc	gtatcaggtg	gtgccgccca	gacagtctgt	420
tggagggcac	ctacctaccc	ccctgctgtg	tggtgagctg	cacgccccca	tcctgctgcc	480
aactgcacca	tgcccaggcc	tcctgctgcc	gcccgctcta	ctgtggacag	tcctgctgcc	540
gccagctctg	ctgctgtgag	cccacttgct	gaaagccagt	ttgcttattt	tcaattgcct	600

aggtcacagt	gtctctgaac	tgttcatccc	ttgaccacct	ctggaccact	aacaagttct	660
cagactttgc	attgcttggtg	atggagacta	ctaagtatat	gagctcacaa	ttctatctga	720
ttccattcta	caatgaatac	cttgaccctt	cactggggac	acagaaatgc	tacaaagcca	780
cctgctgac	atcaatttgc	ttgggatata	ctatttctga	tatttctgca	ggattaaaaa	840
ttactgacat	gttggtggaat	ttatccatga	gaactatcca	caagtctaata	gtttccatgc	900
tttataatct	attttatctt	gtttacctaa	aattttttgc	aacatcaaaag	acaccaaatt	960
atagccaagt	gacattcctc	aagtcaccag	agagaatgga	agctcatcac	ccaacattca	1020
gcttctaaga	agtaggctgg	actttccaca	ttttaacatc	tgatccatcc	cttgggtttt	1080
ggatcataat	gatcttgctt	gctggatatt	tcagttatat	ctgtgatata	atgtcttctg	1140
tcattttctta	ataaatatta	tatactaggc	aaagaaaaaa	aaaaaaaaaa	aaa	1193

<210> 326

<211> 986

<212> DNA

<213> Homo sapiens

<400>	326					
aagcaaccca	gacttcatac	cagctcccaa	caccatgacc	tgctgccaga	ccagcttctg	60
tgatatatccc	agctgctcca	ccagtgggac	atgcggctcc	agctgctgcc	agccaagctg	120
ctgtgagacc	agctgctgcc	agccaagctg	ctgccagacc	agcttctgcg	gatttcctag	180
cttctcaact	agtgggacct	gcagctccag	ttgctgccag	ccaagctgct	gtgagaccag	240
ctgctgccag	ccaagctgct	gccagaccag	ctcctgcgga	actggctgtg	gcattggtgg	300
tgccattggc	tatggccagg	agggcagcag	tgagagctgtg	agcaccgta	tcaggtggtg	360
cgcgccagac	tgccgtgtgg	agggtaacctg	cctgcccccc	tgctgtgtgg	tgagctgcac	420
accccccaacc	tgctgccagc	tgaccacgc	cgaggcctcc	tgctgccgcc	catcctactg	480
tgagacgtcc	tgctgccgcc	cagtctgctg	ctgctactcc	tgtagccca	cctgctaaaa	540
gccagtttgc	tgattttcaa	cttgaattt	ccactttcag	ttccattcat	gaacgaatta	600
tttcttcaag	cacttatgga	caacgaacaa	attcttcaac	ctttctttgt	ctttcttatg	660
ggggttacca	aatatttttg	cctcagaatt	atctgattcc	tttcaattcc	agaaagacct	720
tactcttctc	tctgaggacg	ccaaaataca	aatttgacc	aagaaatgaa	aaagccgatt	780
taccttgaaa	ctgagccttt	gcaagcattg	aagcccacgc	tctgagtcctc	agcgcgacg	840
agaccatgga	agagccatct	gtccttctca	ggacactcac	ttcctgtatc	ccaccgtcct	900
gcaaattgca	ccccctatga	aagaggaata	atataccaag	gtctaataaa	ttttaactat	960
tggtgcaaca	aaaaaaaaaa	aaaaaa				986

<210> 327

<211> 903

<212> DNA

<213> Homo sapiens

<400>	327					
aataggcagc	cataattcag	aaactcctcc	aagcaaccca	accttcagat	caactcctga	60
caccatggcc	tgctgtcaga	ccagcttctg	tggaatttccc	agctgctcca	ccagtgggac	120
ctgcccgtcc	agctgctgcc	agccaagctg	ctgtgagacc	agctcctgcc	agccacgctg	180
ctgtgagacc	agctgctgcc	agccaagctg	ctgccagacc	agcttctgtg	gatttcctag	240
cttctcaacc	ggtagggactt	gtgactctag	ctgctgccag	ccaagctgct	gtgaaactag	300
ctgctgccag	ccaagctgct	accagaccag	ctcctgcgga	actggctgtg	gcattggtgg	360
tgccattggc	tatggccagg	agggcagcag	tgagagctgtg	agcaccgta	tcaggtggtg	420
cgcgccagac	tgccgtgtgg	agggtaacctg	cctgcccccc	tgctgctgtg	tgagctgcac	480
acccccatcc	tgctgccagc	tgaccacgc	cgaggcctcc	tgctgccgcc	catcctactg	540
tgagacgtcc	tgtagggactt	cagtctgctg	ctgctactgc	tctgagccca	cttgttgaaa	600
acctccttct	gctggggatc	ctgataagat	ggcaccttaa	aactagccaa	attagaatcc	660
taacaatctt	ctgaactcca	gtacctataa	ctgggcttgc	aacctctcat	cacacagcca	720
cataaattcc	ctaggaagta	aattcattta	caatggaaga	ccaaaaattt	ttcctagacc	780
tggttgctcag	ccaaagtcct	acaatgtgaa	aagagttaga	tactatttta	ctataaatat	840
cacctgaat	atttcaacag	ttattgggac	ttaaatttaa	taaaagtttt	catctcttca	900
atg						903

<210> 328

<211> 615

<212> DNA

<213> Homo sapiens

<400> 328

cgtgacctgc	gtgccccgct	gcacgcgccc	catctgcgag	ccttgccgcc	gcccgggtgtg	60
ctgcgacccc	tgctccctgc	aggaaggctg	ctgcgcgccc	atcacctgct	gcccctcgtc	120
gtgcacggct	gtggtgtgca	ggccctgctg	ctggggccacc	acctgctgcc	agcctgtgtc	180
tgtgcagtcc	ccctgctgcc	ggccccctg	cggccagccg	accccttgca	gcaccacctg	240
caggacctcc	tcctgctgag	ccaccacctg	ctgccagcct	gtgtctgtgc	agtccccctg	300
cggccagccg	accccttgca	gcaccacctg	caggacctcc	tcctgctgag	cagcccgtaa	360
tcacgaaggg	cccctcagaa	gatggccagg	tccatcccgc	tgcccctcag	ggcttcaccg	420
cagagcaata	cacgtttcct	tgagaagccc	atctctcatc	tcttcatact	agctcacact	480
atgcattgaa	gacacctttt	cagaccaacc	acagatgaga	aatacttttc	ctaggactcc	540
agtctaactc	ctatatcatg	ttgtctgctt	tctaataaac	tcaatactcc	taccataaaa	600
aaaaaaaaaa	aaaaa					615

<210> 329

<211> 812

<212> DNA

<213> Homo sapiens

<400> 329

aatagcccaa	cccacaccag	cctcagacac	caccatgacc	ggctcctgct	gcggtccac	60
cttgtcctcc	ctgagctacg	ggggaggctg	ctgccagccc	tgctgctgcc	gcgacccttg	120
ctgctgcccgc	cccgtgacct	gccagaccac	cgtgtgcccgc	cccgtgacct	gcgtgcccgc	180
ctgcacgcgc	cccatctgcg	agccctgccc	ccgcccggcg	tgctgcgacc	cctgctccct	240
gcaggaaggc	tgctgccgcc	ccatcacctg	ctgcccctcg	tcgtgcacgg	ctgtggtgtg	300
caggccctgc	tgctgggcca	ccacctgctg	ccagcctgtg	tctgtgcagt	ccccctgctg	360
ccggcctccc	tgcgccagc	cgacccttg	cagcaccacc	tgaggacct	cctcctgctg	420
agaccccaat	gccccacag	agcaatacac	tgaagcctaa	acatctatct	gggtgtttta	480
aaaaagttaa	agaaaaatag	atcttttttc	acaagggtgac	aatagtgtat	tttaccatct	540
ggatacagcc	tggtgtaagc	agacgtccat	taccaccctc	acccacattt	tcagggtgtct	600
acatcagcct	tagtcattat	ggatagtaaa	tcgaccttta	agaattcctg	gggtggactt	660
tgcaaacaca	ttctacaacc	tgatgggttt	tactgtctca	actgtcacca	tcattctttg	720
caatgtgttg	ctcactgttg	tcaataaact	aatttttccct	ggcaaaaaaa	aaaaaaaaaa	780
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aa			812

<210> 330

<211> 601

<212> DNA

<213> Homo sapiens

<400> 330

tgcttggtga	gtgtggctac	ttccttgaac	cacatggaga	cacattgtac	aggaagaagt	60
gcctccttct	gctcgtcatc	tgcgattctc	atctgacacc	atggtcagct	tctgtttag	120
ctctgtctgc	tctgaataga	gctgtggcca	aggcctctgc	cagacctgct	gctgctgcag	180
ttgctgccag	accacctact	gcagaaccat	ctgctaccat	cccagctgct	ctgtgtccag	240
ctgttgccag	ccccctgct	gccagtcctt	gtgctgcccc	agctgctgca	tttctagccg	300
ctgccactca	agctgcagtg	tgtccacctg	ctccaggccc	agctgttata	atccccagta	360
ctaccagccc	tcctgctgcc	acccttctgc	tgcacttcta	gctgctgcca	ccctggctgc	420
tgtgtgtcca	gctgctgctg	tccagtcctg	taccagacca	cctgctgtgg	tccagtctcc	480
tatgaatcct	cttgcgtgtg	aacttcattc	ctgaccacca	gccttggttc	aaccaccttg	540

ttgtcagtgt accagtcatt ctcatcccc ttctccactg gacctggcct tgccctgata 600
c 601

<210> 331

<211> 1202

<212> DNA

<213> Homo sapiens

<400> 331

cttcactctc ttgaaaaccc acccagatcc tccccgttct gacaccatgg tcagctcctg 60
ttgtggctcc gtgtgctctg accagggctg cggccaagtc ctctgtcagg agacctgctg 120
ccgccccagc tgctgtcaga ccacctgttg caggaccacc tgctaccgcc ccagctgttg 180
tgtgtccagc tgctgcaggc cccagtgtctg ccagtctgtg tgctgccaac ccacctgctg 240
tcgccccagc tgctgtgaga cgacctgctg ccacctagg tgctgcatct ccagctgctg 300
ccgccccagc tgctgtatgt ccagctgctg caagcccag tgctgccagt ctgtgtgctg 360
ccagccccacc tgctgccgcc ccagctgctg catctccagc tgctgtcgcc ccagctgctg 420
tgtgtccagg tgctgcaggc cccagtgtctg ccagtctgtg tgctgccagc caacctgctg 480
ccgtcccagc tgctgcatct ccagctgctg ccgccccctc tgctgtgaat ccagctgctg 540
ccgccccatg tgctgccgcc cctgctgctg cctgctcca gtctgtggcc gagtctcctg 600
ccacaccact tgctatcgcc caacctgtgt catctccacc tgtccccgcc ccttgtgctg 660
tgctcctctc tgctgtgag cccactgccc tggctcacgt ccccttcac cactggccca 720
cagatgtaga ccctctact gtgtgacca ttaggataca tgaagtggg ttgatgtcat 780
tcaataggat ggaccttatg cttccaaaga gccaccacc atttactga ctctgtgaga 840
acattctggg tcattttaaa ctccctccct tgctttcttt ttcttctggg ggtggacca 900
aatgtgaatt aatttgaat acactagcta agaaattatt ccaatcttct gatttcctta 960
ttttctttat cactttaagg tacagattct ccttctcagt gaggtagata ttatctgcag 1020
gaccagtttt gtcactgatg ttgcacctc agatccagcc acccaattgt attctgtgtt 1080
tctcctaggg tgaatttctt atgctttgtt gcactctctg tttctaataa acttttctgc 1140
acttaagaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
aa 1202

<210> 332

<211> 1219

<212> DNA

<213> Homo sapiens

<400> 332

ttaactctcc tagaaaccca actagatcct tcaccctctg acaccatggg aaactcctgt 60
tgtggctccg tgtgtctctc ccaaggctgt ggccaagacc tctgccagga gacctgctgc 120
cgccccagct gctgtgagac cacctgctgc aggaccacct actgtcgccc cagctgctgt 180
gtgtccagct gctgcaggcc ccagtgtctg cagtctgtgt gctgccagcc cacctgctgc 240
cgccccagat gctgcatctc cagctgctgt cgccccagct gctgtgtgtc cagctgctgc 300
aagccccagt gctgccagtc tatgtgtctg cagcccactt gctgccgccc cagatgctgc 360
atctccagct gctgtcgccc cagctgctgt gtgtccagct gctgcagacc ccagtgtgc 420
cagtgtgtgt gctgccagcc cacctgctgc cccccagct gcagcatctc cagctgctgc 480
cgcccccttt gctgtgaatc cagctgctgc cgccccctgt gctgcctgcg tccagtctgt 540
ggcggagctc cctgccacac cacttgctat cgccccacct gtgtcatctc cagctgcccc 600
cgccccctgt gctgtgcctc ctcttgctgc tgagcccact gccctggctc atctctccct 660
tcaactgcagg cccacagttg tagaccattc ttctgtgtctg actattagga cactggagt 720
gggattgatg tcattcagca ggggtggactt catgtttcca atgagcccat caccatccca 780
ctgactctgt gagaacattc tggttcattt taaactccct cccttgcttt ctttctcttc 840
cagtcattggc accaaatatg aaataatttg taatccacta gctaagaaat tattccaatc 900
ctctaaattc ctcatTTTTT aaatcgTTTT gagcctacag aatatccttc ccagtggagt 960
acacattatc tccatttcaa acatattatt tgtctgtcag cctttcagtc attcttttct 1020
cttggaagg taggaggctg cccctcccat gctctcctgc tttctccctg ttctctcttt 1080
gtctctgttt gttcaagttt gccagaattt ttctatttta ttggttcttt atctttattg 1140
tgttcacaaa atatattgta ttaaaactttt catttagaaa aaaaaaaaaa aaaaaaaaaa 1200
aaaaaaaaaa aaaaaaaaaa 1219

<210> 333

<211> 1077

<212> DNA

<213> Homo sapiens

<400> 333

ctcactctcc	tggaaaccca	ccgagaaact	ccaccctctg	acaccatggg	caactcctgt	60
tgtggctctg	tgtgctctga	ccagggtgtg	ggcctggaga	actgctgccg	ccccagctgc	120
tgccagacca	cctgctgcag	gaccacctgc	tgccgcccc	gctgctgtgt	gtccagctgc	180
tgaggcccc	agtgtgcca	gtctgtgtgc	tgtcagcccc	cctgctgccg	ccccagctgc	240
tgtcagacca	cctgctgtag	gaccacctgc	tgccgcccc	gctgctgtgt	gtccagctgc	300
tgagaccccc	agtgtgcca	gtctgtgtgc	tgccagcccc	cctgctgccg	ccccagctgc	360
tgtcagacca	cctgctgcag	gaccacttgc	tgccgcccc	gctgctgtgt	gtccagctgc	420
tgagaccccc	agtgtgcca	gtctgtgtgc	tgccagcccc	cctgctgccg	ccccagctgc	480
tgcactctcca	gcagctgtg	cccctcttgc	tgtgaatcca	gctgctgccg	cccctgttgc	540
tgccctgcgtc	cagtctgtgg	ccgagtctcc	tgccacacca	cttgctatcg	cccaacctgt	600
gtcactctcca	cctgcccccg	cccctgttgc	tgtgcctcct	cttgctgcta	aatctctgct	660
gtgaacacac	cacttcctta	ttacgtcctt	tcctacagat	gaaggctctc	attgaaaca	720
tgaggactgt	tcaagagaat	tgatctgggt	cccataagca	aacctcatcc	ttagaaattc	780
tgtatttgca	ttctaccttt	tgtccaaact	cccttccttc	caaaggaatt	cattgacaat	840
ctcctaataa	attgacaaat	tgtcctccaa	catcctccca	cctctttgac	ttcaggacat	900
ttattcatca	tgccctaagga	atttgaagat	tgccctccatc	atttgtaggg	ccacagatct	960
taaaagcctcc	aaccttgaag	tccagtgaag	tctctctctt	aaagtctttt	gcaaacatct	1020
ttgtaccttg	ttattttccat	gtaccaaaaat	aaacctctat	tctattggca	ctgaaaa	1077

<210> 334

<211> 942

<212> DNA

<213> Homo sapiens

<400> 334

tagaaatcca	cccagaaact	ccaccctctg	acaccatggg	cagctcctgt	tgtggctctg	60
tcagctctga	gcagagctgt	ggcctggaga	actgctgccg	ccccagctgc	tgccagacca	120
cctgctgcag	gaccacctgc	tgccgcccc	gctgctgcaa	gccccagctgc	tgccagtctg	180
tgtgctacca	gcccacctgc	tgccacccta	gctgctgcat	ctccagctgc	tgccaccctt	240
attgctgtga	atccagctgc	tgccgcccc	gctgctgccg	ccccagctgc	tgccagacca	300
cctgctgcag	gaccacctgc	tgccagacca	cctgctgctg	ccccagctgc	tgtgtgtcca	360
gctgctgcag	accccagctgc	tgccagtctg	tgtgctgcca	gcccacttgc	tgccgtccca	420
gctgctgcat	ctccagctgc	tgccaccctt	cttgctgtga	atccagctgc	tgccgcccct	480
gctgctgcgt	gcgtccagtc	tgtggccgag	tctcctgcca	caccacttgc	tatcgcccaa	540
cctgtgtcat	ctccacctgc	ccccgcccct	tgtgctgtgc	ctcctcttgc	tgctaattgtc	600
tccttgtgat	atttgtcata	ctatgaatgt	cttcattagt	cattttaaata	gcactgtagc	660
cagccagtca	ctggaaaaat	gaacacttcc	ctgccagttt	gtctcatgtg	gcattcagag	720
tggaacattca	gctcttctag	gaaatgacag	acaatcacat	tcattaaaaat	atgttatgcc	780
aggccccaat	gcagttatct	ttagatgagc	agtgtcttca	ttcgaagggg	acactaaactg	840
tgatgatctc	atataatatt	gttttcatgt	attaataaac	agccacttcc	ctaaaaaaaaa	900
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aa		942

<210> 335

<211> 924

<212> DNA

<213> Homo sapiens

```

<400> 335
ctccttcctg gaaacccacc cagaacctcc accctctgac accatgggtca actcctgttg      60
tggctctgtg tgctctgacc agggctgtgg cctagagAAC tgctgccgtc ccagctactg      120
ccagaccacc tgctgcagga ccacctgctg ccgccccagc tgctgccgcc ccagctgctg      180
caggccccag tgctgccagt ctgtgtgctg ccagccccacc tgctgtgcc ccagctactg      240
tgtgtccagc tgctgcagac cccagtgtg ccagaccacc cgctgcagaa ccacctgctg      300
ccgccccagc tgctgtgtgt ccagggtgcta caggccccat tggggccagt ctctatgctg      360
ctagcccatc tgctggcaaa ccacctgcta caggaccacc tgctgccacc ccagctattg      420
catttccagc tgctgccagc cttcctgcag tatctctagc agcagtagct cctcctgctg      480
tggcttcagc tgctgcaggc tctcctgctg catctccagt tgctgccgcc ccaactgctg      540
ccagaccatg tgctgccgcc caacctgctc tagtgcttct tgctgtgag gctgtcatct      600
ggactcacca gattctcatc aaccagcatt cttgatgtag ctcatctatg agctgagtta      660
tgggaagcta gttggaaaac ttcagttcca accaattctt agattgaatc tggcctccaa      720
atatatgctc cccccacatt ttacctctct accaaatgaa cataagttga atttgctctg      780
aaatctgtca actatcttaa ttgaaatatt tgctctctgc cataatttct catatggagc      840
tattccattt taaacaaata tttatctaaa taaatcttaa ataaattttc aggcatagaa      900
ataaaaaaaaa aaaaaaaaaa aaaa
<210> 336

```

<211> 1099

<212> DNA

<213> Homo sapiens

```

<400> 336
cttcttgaa acccaccag aacctccacc ctctgacacc atgggtcaact cctgtgtgtg      60
ctctgtgtgc tctgaccagg gctgtggcct agagaactgc tgccgtccca gctactgcca      120
gaccacctgc tgcaggacca cctgctgccg cccagctgc tggtgtgtcca gctgctgcag      180
acccagtgct tgcagacca cctgctgcag gaccacctgc tgccacccca gctgctgtgt      240
gtccagtgct tgcagacccc agtgcgtcca gtctgtgtgc tgccagccca cctgctgcag      300
accccaatgc tgcagacta cctgctgtag gaccacctgc tgccgccccca gctgctgcag      360
gccccagtgct tgcagctctg tgtgctgcca gccacctgc tgctgccccca gctactgtgt      420
gtccagctgc tgcagacccc agtgcgtcca gaccacctgc tgcagaacca cctgctgccg      480
ccccagctgc tgtgtgtcca ggtgctacag gccccattgt ggccagtctc tatgctgcta      540
gcccactgct tggcaaacca cctgctacag gaccacctgc tgccacccca gctattgcat      600
ttccagctgc tgcagcctt cctgcagtat ctctagcagc agtagctcct cctgctgtgtg      660
cttcagctgc tgcaggctct cctgctgcat ctccagttgc tgccgccccca actgctgcca      720
gaccatgtgc tgcgccccaa cctgctctag tgcttcttgc tgctgaggct gtcactgtga      780
ctcaccagat tctcatcaac cagcattctt gatgtagctc atctatgagc tgagttatgg      840
gaagctagtt ggaaaacttc agttccaacc aattcttaga ttgaatctgg cctccaaata      900
tatgctcccc ccacatttta cctctctacc aaatgaacat aagttgtaat ttgctctgaa      960
atctgtcaac tatcttaatt gaaatatttg ctctctgcca taattttctca tatggagcta      1020
ttccatttta aacaaatatt tatctaaata aatcttaaat aaattttcag gcatagaaaa      1080
aaaaaaaaaa aaaaaaaaaa
<210> 337

```

<211> 782

<212> DNA

<213> Homo sapiens

```

<400> 337
ccaccttcct ggaaatccac ccagaacctc caccctctga caccatgggtc aactcctggt      60
gtggctctgt gtgctctgac cagggtgtgt gcctagagaa ctgctgccgt cccagctgct      120
gccagaccac ctgctgcagg accacctgct gccgccccag ctgctgtgtg tccagctgct      180
gcagaccgca gtgctgccag tctgtgtgct gccagcccac ctgctgcagc cccagctgct      240
gccagaccac ttgctgcagg accacctgct gccgtcccag ctgctgtgtg tccagctgct      300
tcagacccca gtgctgccag tctgtgtgct gccagcccac ctgctgccgc cccagctgtg      360
gccagaccac ctgctgcagg accacctgct accgccccag ctgctgtgtg tccacctgct      420
gccgccaac ctgctctagt ggctcttgct gctgatgcc tcacctatac tcacctgct      480

```

ttattaacca	gcattcttga	tatgatccac	ctgtgaactg	aatcatgcaa	ggccaattgg	540
acaacctcag	ttccaaccaa	ttcttggatt	gagtttggcc	tccaaatatg	ctcaccaaac	600
actatgttgc	tacctcttac	caaatgaata	caagtttgaa	ttttctctga	aatatgtcaa	660
ccccatgttc	cctgaattga	aatatttgct	ctctaccata	atttatcaca	tggagctatt	720
cctctatctt	aaataaattt	taatttttga	ggcatgcaaa	taaaaaaaaa	aaaaaaaaaa	780
aa						782

<210> 338

<211> 754

<212> DNA

<213> Homo sapiens

<400> 338						
ctgtcttggg	aacctaccta	gaacctccac	cctctgacac	catgggtaac	tcttgttgtg	60
gctctgtctg	ctctgaccag	ggctgtgatc	aaggcctctg	ccaagagacc	tgctgccgcc	120
ccagctgctg	ccagaccacc	tggtgctgcc	ccagctgtgt	tgtatccagc	tgctgccgcc	180
catcctgctc	tcagactacc	tgctgccaga	ccacttgctg	tcgccccagc	tgctgccgcc	240
cagtctgttg	tcagaccacc	tgccgcccc	gctgtgggtg	gtccagctgc	tgccgtccac	300
tctgttgttc	gaccacctgc	cgccccagct	gtgggtgtgc	cagctgctgc	cgtccactct	360
gctgtcagac	cacctgctgc	cgtacaactt	gctgccgccc	cagctgctgt	ggatcctctt	420
gttgaacctc	atattggact	atcaaccatg	agccagtcac	catcccatga	tatgaaagtg	480
tcattttatat	caatttgtcc	atgtgttaaa	tggccatcag	ctttattatc	ctgttattcc	540
actaagtaac	tggtgaaagg	gcattccatct	acattttaata	ccactcattt	ttcccatgga	600
tctcttccca	gcattcagac	ctcagatgca	tgatgcagtt	agaactaagcc	tctaagtctc	660
tgactgttat	gcttgatttg	accttcaaaa	ttacatatta	actgttcttc	aataaatatt	720
atcttaatat	cagtaaaaaa	aaaaaaaaaa	aaaa			754

<210> 339

<211> 1042

<212> DNA

<213> Homo sapiens

<400> 339						
tgacaccatg	accactgttt	gtcccccttg	ctgtcagcct	acctgctgca	ggaccacctg	60
ctgcaggacc	acctgctgga	agccccacc	tgtgaccacc	tgcagcagca	cacctgtctg	120
ccagcccgcc	tgctgtgtgt	ccagctgctg	ccagccttgc	tgccgccc	cttgtgtgca	180
aaacacctgc	tgtaggacca	cctgctgcca	gccccacctg	gtgaccagct	gctgccagcc	240
ttcctgctgc	agcacaccct	gctgccagcc	cacctgctgt	gggtccagct	gctgtggcca	300
aaccagctgt	gggtccagct	gtggccagag	cagctcctgt	gcacctgtgt	actgcagaag	360
aacctgctac	tacccacga	ctgtctgcct	gcctgggtgc	ctaaaccaga	gctgtggctc	420
caactgctgc	cagccctgct	gccgcccagc	ctgctgtgag	accacctgct	gcaggaccac	480
ttgcttccag	cccacctgtg	tgtccagctg	ctgccagcct	tcttgtgctg	gatcacgttc	540
caagagaacc	accatcctca	cacaacaaat	ttctgctcaa	ctgactcatc	ttttggggga	600
ctaatttaat	ttgctgctga	cagccaccat	gctctcacc	aaatttttat	gaattctcta	660
catgttttaa	atcttgga	tctgcttgag	ggagggcaga	atacttcac	ctgattctct	720
ttttccttac	accttggtga	tcatgtgcca	gcttcacatg	ttctcaagtt	tgagtcattg	780
tctcagcttt	gactctaaag	tcaagagctt	cattccctgc	ttctaaggaa	tttaggtttc	840
tgcaactgat	cgatgatctt	tgcaatcttt	tttttgtttt	caatatcctc	ctcatcgttc	900
ttgtatcctt	ctttcttctt	ttcatgataa	atthgtgttg	tgctccctgg	agcagaaatc	960
cttacctata	tgtttctgaa	ttaattctga	accatcctca	tctcaaaaaa	aaaaaaaaaa	1020
aaaaaaaaaa	aaaaaaaaaa	aa				1042

<210> 340

<211> 1020

<212> DNA

<213> Homo sapiens

<400> 340
 tcacctctta acagaagccc accctccatc cctgacacca tgaccactg ttgctccct 60
 tgctgtcagc ctacctgctg caggaccacc tgctggcagc ccaccactgt gaccacctgc 120
 agcagcacac cctgctgtca gccctcctgc tgtgtttcca gctgctgcca gccttgctgc 180
 caccacaactt gctgtcaaaa cacctgctgt aggaccacct gctgccagcc catctgtgtg 240
 accagctgct gccagccttc ctgctgtagc acacctgct gccagccac atgctgtggg 300
 tccagctgtg gtcagagcag ctctgtgtca cctgtgtact gcagaagaac ctgctaccac 360
 cccacaagtg tttgtctgcc tgggtgccta aaccagagct gtggctccaa ctgctgccag 420
 ccctgctgcc gccagcctg ctgtgagacc acctgctgca ggaccacttg tttccagccc 480
 acctgtgtgt acagctgctg ccagccttct tgetgttaat caactccaa gagaactacc 540
 atcctcacac aacaaccttc agtcaactg acttgtcttt tgagggacta atttactttg 600
 ctgctgacag ccaccatgct ctcacccaaa tttttatgaa ttctctacat gtttaaaatc 660
 ttgggaatct gcttgaggga gggcagaata cttcatcctc attcctctt tccttacacc 720
 ttgtggatca tgtgccagct tegtctgttc ttaatttgga gtcatgatct cagctttgtc 780
 tcaaaaatca agagcttcat tctttgcttc taaggaattt aggtttctgc aactgatcaa 840
 tcattctttg aattatattt tcattttaaa tatccttctc atggttcttg tatecttctt 900
 tcttcttttc acgataactt tgggttatgt ctctggtagc agagattctt acctatatgt 960
 ttctgaataa actctgaacc atcttcatct caaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1020
 <210> 341

<211> 1007

<212> DNA

<213> Homo sapiens

<400> 341
 tctgaacaga actccaccct ctaccctga caccatgacc cactgttggt ccccttgctg 60
 tcagcctacg tgctgcagga ccacctgctg gaagcccacc actgtgacca cctgcagcag 120
 cacacctgc tgccagccct cctgctgtgt gtccagctgc tgccagcctt gctgccgccc 180
 aacttgctgt caaaacacct gctgccagcc catctgtgtg accagctgct gccagccttc 240
 ctgctgcagc acacctgct gtcagccac ctgctgtggc caaaccagct gtgggtccag 300
 ctgtggtcag agcagctcct gtgcacctgt gtactgcaga agaacctgct accacccac 360
 gactgtctgc ctgcctggtt gcctaaacca gagctgtggc tccagctgct gccagcctg 420
 ctgccgcca gcctgctgtg agaccacctg ctgcaggaca acttgcttcc agcccacctg 480
 tgtgtacagc tgctgccagc cttcttgctg ctgatcaagt cccaagagaa ccaccatact 540
 cacacaacaa atttctgctc aactgactca tcttttgggg gactaattta atttgctgct 600
 gacagccacc atgctttcac ccaaattttt atgaattctc tgcattgtta aaatcttggt 660
 aatcagcctg agggagggca gaataactca tcttgattct ctttttctt acaccttggt 720
 gatcatgtgc cagcttcgtc tgttctcaat ttggaatcat gatctcaact ttgactcaaa 780
 agtcaagagg ttcatctctt gcttctaagg aatatagggt tctgcaaccg accaataatt 840
 tttgcaatca catttttggt ttcaatatcc tctcatgggt tcttgtatc ttctttatc 900
 ttttcatgat aactttgagt tatgtccttg gtaacagaga ttcttaccta tatatttctg 960
 aataaactct taaccatcct catctcaaaa aaaaaaaaaa aaaaaaa 1007
 <210> 342

<211> 953

<212> DNA

<213> Homo sapiens

<400> 342
 ccatgaccca ctgttgctcc ccttgctgtc agcctacctg ctgcaggacc acctgctgca 60
 ggaccacctg ctggaagccc accactgtga ccacctgcag cagcacaccc tgctgccagc 120
 cctcctgctg tgtgtctagc tgctgccagc cttgctgccc cccagcttgc tgtcaaaaaca 180
 cctgctgcag gaccacctgc tgccagccca cctgtctgtc cagctgctgt ggccaaacca 240
 gctgtgggtc cagctgtggc cagagcagct cctgtgcacc tgtgtactgc agaagaacct 300
 gctactaccc gacgactgtc tgcctgcctg gttgcctcaa ccagagctgt ggatccagct 360

gctgccagcc	ctgctgccgc	cccgcctgct	gtgagaccac	ctgctgcagg	accacttgct	420
tccagcccac	ctgtgtgtcc	agctgctgcc	agccttcttg	ctgctgatca	agtocccaaga	480
gaacaaccat	cttcacacaa	caaccttctg	ctcaactgac	ttatcttttg	gaggactaat	540
ttaccttact	gctgacagca	accatgttct	cacccaaatt	tttatgaatt	ctctgcatat	600
ttaaaatctt	gtgaatcagc	ttgagggagg	gcagaatact	tcatectgat	tctctttttc	660
ttataacctg	tgaatcatgt	gccagcttca	tctgtttctca	atthttgagtc	atgggtctcag	720
ctttgactca	aaagtcaaga	gcttcattct	cttcacttaa	gaaacttaag	ttgctgcaaa	780
tgattaagaa	tcttcacaac	tatgttttct	tttcaatata	ctcatgattc	ttgtatcctg	840
cttccttctt	ttaatgatca	ctttgggtta	tctccctata	accagggatc	ttacctatat	900
atctcttaat	aaataaattt	ggaactatta	ttcataaaaa	aaaaaaaaaa	aaa	953

<210> 343

<211> 990

<212> DNA

<213> Homo sapiens

<400> 343						
tctgaacaga	agcccaccct	ctacccttga	caccatgacc	cactgttgct	ccccttgctg	60
tcagcctaca	tgctgcagga	ccacctgctg	caggaccacc	tgctggaagc	ccaccactgt	120
gaccacctgc	agcagcacac	cctgctgcc	gccctcctgc	tggtgttcca	gctgctgcca	180
gccttgctgc	cgcccaactt	gctgtcaaaa	cacctgctgc	cagccacact	gtgtgaccag	240
ctgctgccag	ccttcctgct	gcagcacacc	ctgctgccag	cccacctgct	gtgggtccag	300
ctgtgaccag	agcagctcct	gtgcacctgt	gtactgcaga	agaacctgct	actacccac	360
aactgtctgc	ctgcctggtt	gcctaaacca	gagctgtggc	tccaactgct	gccagccctg	420
ctgccgccca	gcctgctgtg	agaccacttg	cttcagcccc	acctgtgtgt	ccagctgctg	480
tcagcctttt	tgctgctgat	caagtcccaa	gagaaccacc	atcctcacac	aacaactttc	540
tgctcaactg	acttatcttt	tgggggacta	atttaatttg	ctgctgacag	ccaccatgct	600
ctcacccaaa	tttttatgaa	ttctctacct	gtttaaaatc	ttgggaatct	acttgaggga	660
gggcagaata	cttcacacctg	attctctttt	tccttacact	ttgtggatca	tgtgccagct	720
tcgtgtgttc	tcaattttga	gtcatggctc	cagctttgac	tcaaaagtca	agagcttcat	780
tctctgcttc	taaggaattt	aggtttctgc	aactgatcaa	taatctttgc	aatcatattt	840
ttgttttcaa	tatcctcttc	atggttcttg	tatccttctt	tcttcttttc	ataactttgg	900
gttatgtttc	tgctaccagc	agagattctt	agctatatgt	ttctgaataa	actctgaacc	960
atcctcaaaa	aaaaaaaaaa	aaaaaaaaaa				990

<210> 344

<211> 725

<212> DNA

<213> Homo sapiens

<400> 344						
actttggagg	ccagggtgtat	aaaagggtcca	gattgcaagg	ggatcatcaga	ttctgggaaa	60
ctcacctctg	aacagaaacc	cacctccac	cctgacacc	atgaccact	gctgttcccc	120
ttgctgtcag	cctacatgct	gcaggaccac	ctgctgcagg	acaacctgct	ggaagccac	180
cactgtgacc	acctgcagca	gcacatcctg	ctgccagccc	tcctgctgtg	tgtccagctg	240
ctgccagcct	tgctgccacc	caacttgctg	tcaaaacacc	tgctgcagga	ccacctgctg	300
ccagccacc	tggtgtgacca	gctgctgcc	gccttcctgc	tgagcacac	cctgctaaca	360
gccacctgc	tggtgggtcca	gctgctgtgg	ccaaatcatc	tggtgggtcca	gctgctgcca	420
gccagctcc	tggtgcacca	tctactgcag	gagaacctgc	taccacccca	cgagtgtctg	480
cctgcctggt	tgccctaaatc	agagctgtgg	ctccagctgc	tgccagccct	gctgccgccc	540
agcctgctgt	gagaccacct	gctgcaggac	cacttgcttc	cagccacctt	ctgtgatcag	600
ctgctgtcag	ccttcttgct	gctgaccaac	tctccagagg	accaccatcc	tcacacagca	660
accttctggc	aaccttctgt	cctcctcttg	gaggacaaat	ttactttcaa	actttgctga	720
caacc						725

<210> 345

<211> 1230

<212> DNA

<213> Homo sapiens

```

<400> 345
atgtctggca gttgctcttc taggaaatgc ttctccgtgc cagccacctc tctctgctcc 60
actgaggtga gctgtggagg ccccatctgc ctgcccagtt cctgccagag ccagacatgg 120
cagctggtga cttgtcaaga cagctgtgga tcatccagct gtgggccaca gtgccgtcag 180
ccctcctgtc ctgtgagtag ctgtgcccac cccctgtgct gtgacccctg catttgtgag 240
ccttcttgct ccgtgagcag cggctgcccac cccgtgtgct gtgaggccac cacctgtgag 300
ccttcttgct ctgtgagcaa ctgctaccaa cctgtgtgct tggaggccac catctgtgag 360
ccttcttgct cagttagcaa ctgctgcccac cctgtgtgct ttgaggccac cgtttgtgag 420
ccttcttgct ccgtgagcag ctgtgctcaa cctgtgtgct gtgagcctgc tatttgtgag 480
ccttcttgct ccgtgagcag ctgctgccag cctgtaggct ctgaagccac ttcttgccaa 540
ccagtcctct gtgtgcccac ttcttgccag cctgtcctct gcaaataccag ctgctgccag 600
ccagttgtct gtgagcccag ctgctgttca gctgtctgca ccctgcctag ttcttgccaa 660
cctgtggtct gtgagccttc ctgctgtcag ccggtgtgcc cgacacctac ctgctctgtg 720
accagtagct gccaggtgt ctgctgtgac ccagccctt ggtcttctgc atctgccatc 780
tgccgaccaa cttgtcctag gactttctac ataccagtt ccagcaaacg gccttgccag 840
gctacgattt cctaccgccc ggtctccctg ccgatctgcc gcccaatctg ctctggactc 900
ctcacctata ggcagccata catgacatcc atctcctacc gtcttgctg ctatcgccca 960
tgctactcca tcctgcgcg cccagcctgt gtcacttct actcttgccg ccagctctac 1020
ttccgcccac cttgactga gtctgactct tgcaaacggg attgcaaaaa atccacttcc 1080
agccaactgg attgtgtga cacaaccccc tgcaaggtgg atgtctcaga agaggctccc 1140
tgccagccca ctgaagccaa acccatcagc ccaaccaccc gtgaggccgc agcagctcag 1200
cctgtctgca gcaagcctgc caactgctaa
<210> 346.
1230

```

<211> 815

<212> DNA

<213> Homo sapiens

```

<400> 346
gaactccggc tgcgttacgc acctgcgagc tgacggggccc ggaccatggg gtgctgcccc 60
ggggactgct tcacctgctg caccaggag caaaactgct gtgaagagtg ctgctgtcag 120
ccgggctgct gtggctgctg cggctcctgc tgtggctgtg ggggctctgg ctgcgggggc 180
tctggctgcg ggggcagctg ctgcgatcg tcttctgtg gatctggctg cggaggctgt 240
ggaggctgcg gaggctgcg ggggtgctgc tgtggatcca gttgctgtg gtccagttgc 300
tgccgctccg ggtgctgtgg gcctgtgtgc tgccagccca cacctatatg cgacacaaaa 360
tgaagacctt tccctccacc actgatgcag tcccaccgaa agcctccatc tgctccaggg 420
ggacagcccc tcgtgtccag aaccttccat accccaaga cagtgtcttg tctttctgtg 480
atltgtagag gagggttgt tctccaacac cttctctggt atttcaaggc accgagaaca 540
agagccatac tctgatgaaa cattaaaact cggtcacaa taagtgatcc caagctcaag 600
ggtgaatccc caatacttta cttattcaca tgaagttcaa tgtctgttac tataagacat 660
cctcttcttc aagggtgtct tgggactgat cctccgccct ggctttctgc agctttgaga 720
tgcaaaaaag gtccatcttc tttgtgagcc tcttaataaa tttgagcatg ctggcataaa 780
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa
<210> 347
815

```

<211> 1252

<212> DNA

<213> Homo sapiens

```

<400> 347
ggactctgtc ttcagctgga cactccctcc ctgcaccatg tcttacagtt gtggcctgcc 60
cagcctgagc tgccgcacca gctgctctcc ccggccctgt gtgccccca gctgccacgg 120

```

ctgcaccctg	cccggggcct	gcaacatccc	cgccaatgtg	agcaactgca	actggttctg	180
tgagggctcc	ttcaatggca	gtgagaagga	gaccatgcag	ttcctgaacg	accgcctggc	240
cagctacctg	gagaaggtgc	gtcagctgga	gcgggacaac	gcggagctgg	agaacctcat	300
ccgggagcgg	tcacagcagc	aggagccctt	ggtgtgtgcc	agctaccagt	cctacttcaa	360
gaccattgag	gagctccagc	agaagatcct	gtgcagcaag	tctgagaatg	ccaggcttgt	420
ggtgcagatc	gacaatgcca	agctggcctc	agatgacttc	aggaccaa	atgagaccga	480
gctgtccctg	cggcagctgg	tggagtccga	catcaatggc	ctgcgcagga	tcctggatga	540
gctgaccctg	tgcaggtctg	acctggaggc	ccaggtggag	tcctgaagg	aggagctgct	600
gtgcctcaag	cagaaccatg	agcaggaggt	taacaccctg	cgctgccagc	ttggagaccg	660
cctcaacgtg	gaggtggacg	ctgtccccc	tgtggacctg	aaccaggtcc	tgaatgagac	720
caggagtcag	tatgaggccc	tggaggaaac	caaccgcagg	gaagtggagc	aatggttcgc	780
cacgcagacc	gaggagctga	acaagcaggt	ggtatccagc	tcggagcagc	tgagtccta	840
ccaggcggag	atcatcgagc	tgagacgcac	ggtcaatgcc	ctggagatcg	agctgcaggc	900
ccagcacaac	ctgcgagact	ctctggaaaa	cacgctgaca	gagagcgagg	cccgtacag	960
ctcccagctg	tcacaggtgc	agagactgat	caccaacgtg	gagtcccagc	tggcggagat	1020
ccgcagtgac	ctggagcggc	agaaccagga	gtatcaggtg	ctgctggacg	tgccggcgcg	1080
gctggagtgt	gagatcaaca	cgtaccggag	cctgctggag	agcgaggact	gcaagctccc	1140
ctccaacccc	tgccccacaa	ccaatgcatg	tgacaagtcc	actgggccct	gtatctctaa	1200
tcctgtggc	ctacgtgctc	ggtgtgggccc	ttgcaacaca	tttgggtact	ag	1252

<210> 348

<211> 1621

<212> DNA

<213> Homo sapiens

<400> 348

cagggttttga	aactgacttc	cagagctcca	ctgcctccct	gcaccatgcc	ctacaacttc	60
tgcttgccca	gcctgagctg	ccgcaccagc	tgctcctccc	ggccctgtgt	gccccccagc	120
tgccacggct	acaccctgcc	cggggcctgc	aacatccctg	ccaatgtgag	caactgcaac	180
tggttctgcg	agggtcctt	caatggcagc	gagaaggaga	ctatgcagtt	cctgaacgac	240
cgcctggcca	gctacctgga	gaaggtgctg	cagctggagc	gggacaacgc	ggagctggag	300
aaactcatcc	gggagcggtc	tcagcagcag	gagcccttgc	tgtgccccag	ctaccagtc	360
tacttcaaga	ccattgagga	gtccagcag	aagatccctg	gcagcaagtc	tgagaatgcc	420
aggctggtgg	tgcatatcga	caatgccaa	ctggctgcag	atgacttcag	aaccaagtac	480
cagacggagc	agtccctgcg	gcagctggtg	gagtcgcaca	tcaacagcct	gcgcaggatt	540
ctggatgagc	tgacctgtg	caggtctgac	ctggaggccc	agatggagtc	cctgaaggag	600
gagctgctgt	ccctcaagca	gaaccatgag	cagggaagtca	acaccttgcg	ctgccagctt	660
ggagaccgcc	tcaacgtgga	ggtggacgct	gctcccgcgt	tggacctgaa	ccaggtcctg	720
aacgagacca	ggaatcagta	tgaggccctg	gtggaaacca	accgcaggga	agtggagcaa	780
tggttcgcca	cgcagaccga	ggagctgaac	aagcagggtg	tatccagctc	ggagcagctg	840
cagtcctacc	aggcggagat	catcgagctg	agacgcacag	tcaatgccct	ggagatcgag	900
ctgcaggccc	agcacaacct	gcgatactct	ctggaaaaca	cgctgacaga	gagcgaggcc	960
cgctacagct	cccagctgtc	ccaggtgcag	agcctgatca	ccaacgtgga	gtcccagctg	1020
gcggagatcc	gcagtgcact	ggagcggcag	aaccaggagt	atcaggtgct	gctggacgtg	1080
cgggcgcggc	tggagtgtga	gatcaacaca	taccggagcc	tgctggagag	cgaggactgc	1140
aagctgccct	ccaacccctg	cgccaccacc	aatgcatgtg	aaaagcccat	tggatcctgt	1200
gtcaccaatc	cttgtggtcc	tcgttcccgc	tgtgggcctt	gcaacacctt	tgggtactag	1260
ataccctggg	gccagcagaa	gtatagcatg	aagacagaac	taccatcggt	gggccagttc	1320
tgctctctg	acaaccatca	gccaccggac	cccaccccga	ggcatcacca	caaatcatgg	1380
tctggaagga	gaacaaatgc	ccagcgtttg	ggtctgactc	tgagcctagg	gctacttgat	1440
cctcctcacc	ccaggtccct	ctcctgtagt	cagtcctgagt	tctgatggtc	agaggttggg	1500
gctgtgacag	tggcatacga	ggtgttttgt	tctctctgct	gcttctacct	ttattgcagt	1560
tccccaaatc	gcctaataaa	ctttcctctt	gcaaagcaga	caaaaaaaaa	aaaaaaaaaa	1620

<210> 349

<211> 1713

<212> DNA

<213> Homo sapiens

<400> 349
 ggaaaggaaa ctatgctgta tgccaagccc ccaccacaa ttaatggat aaaaggactg 60
 cagaggaagg agagactcaa acctgcccac atccacctcc agcagcttac ctgcttttcc 120
 attacctgtt ccagcaccat gtcttacagt tgttgccctg ccagcctggg ctgccgcacc 180
 agctgctcct cccggccctg cgtgcccccc agctgccacg gctacacctt gctgggggcc 240
 tgcaacatcc ccgccaatgt gagcaactgc aactgggtct gtgagggctc cttcaatggc 300
 agcgagaagg agactatgca gttcctgaac gaccgcctgg ccagctacct ggagaagggtg 360
 cgtcagctgg agcgggacaa cgcgagctg gagaaactca tccaggagcg gtcccagcag 420
 caggagccct tgtgtgccc cagctaccag tctacttca agaccattga ggagctccag 480
 cagaagattc tgtgtgcca ggctgagaat gccaggctgg tggatgaacat tgacaatgcc 540
 aagctggcct ctgacgactt cagaagcaag taccagacgg agcagtcctt gaggtgttg 600
 gtggagtcgg acatcaacag catacgagg atcctggatg agctgacctt ctgcaagtct 660
 gacctggagt cccagggtga gtccctgagg gaggagctga tctgcttgaa gaagaacctt 720
 gaggaggagg ttaacacctt cttggagacc gcctcaacgt ggagggtggac 780
 actgccccca ctgtggacct gaaccaggctc ctgaacgaga ccaggagtca gtatgaggct 840
 ctgggtgaaa ttaaccgcag ggaagtggag caatgggttc ccacgcagac cgaggagctg 900
 aacaagcagg tggatatccag ctccagagcag ctgcagtcct gccaggcgga gatcatcgag 960
 ctgagacgca cagtcaacgc cctggagatc gagctgcagg cccagcacia cctgcgagac 1020
 tctctggaaa acacgctgac ggagagcgag gcccactaca gctccagct gtcccagggtg 1080
 cagagcctga tcaccaacgt ggagtctcag ctggcagaga tccgctgtga cctggagcgg 1140
 cagaaccagg agtaccaggt gctgctggac gtgcgtgccc ggctggagtg tgagatcaac 1200
 acgtaccgga gcctcctgga gagtggagac tgcaagctcc cctgcaaccc atgcgccacc 1260
 accaatgcta gtggcaactc ctgtggacct tgtggacct ctcaaaaggg ttgctgtaat 1320
 tgaaaagctt gtatcctctt tgaagacatc tacaagcca tttagatcaa ccacaggaag 1380
 gatcctcaag tctgactttt tctggagctc agctgacatc aagaaacctc atcttgctc 1440
 tatgttattt ctagaatgct gaaaagcttt cctgacccaa gcaaagacac acatcatcaa 1500
 cttccaatgt ctggacaact ccttctgtgt gagggtcgag cctgtttgtt tctaaagatg 1560
 ttcagctccc tgtaatctga gctccagtta ctacttaagg tgtttcctga acgtactact 1620
 gcatttcctg ttttcctttt ttctttggca ttctctggaa tgcaaggagg agacttcatt 1680
 tacttcccaa taaacttcat ttctctggca taa 1713
 <210> 350

<211> 1616

<212> DNA

<213> Homo sapiens

<400> 350
 gagaatttag actctgtctt cagccaggga ctccctccct ccctcccagc actatgccct 60
 acaacttctg cctgcccagc ctgagctgcg gcaccagctg ctctctcccg ccctgcgtgc 120
 ccccagctg ccacagctgc acctgcccc ggccctgcaa catccccgcc aatgtgagca 180
 actgcaactg gttctgctg ggctccttca atggtagcga gaaggagact atgcagttcc 240
 tgaacgaccg cctggccagc tacctggaga aagtgcgtca gctggagcgg gacaacgcgg 300
 agctggagaa cctcatccgg gagcgggtctc agcagcagga gcccttgctg tgccccagtt 360
 accagtccta ttttaagacc attgaggagc tccagcagaa gatcctgtgt accaagtctg 420
 agaatgccag gcttgtggtg cagatcgaca acgccagct ggctgcggat gatttcagaa 480
 ccaagtacca gaccgagctg tcctgcccgc agctgggtga gtccgacatc aacggtctgc 540
 gcaggatcct ggatgagctg accctgtgca agtccgacct ggaggcccag gtggagtccc 600
 tgaaggagga gctgctctgc ctcaagagca accatgagca ggagggtcaat accctgcgct 660
 gccagcttgg agaccgcctc aatgtggagg ttggtgctgc tcccactgtg gacctgaatc 720
 gggctgtgaa cgagaccagg agtcagtatg aggccctggg ggaaaccaac cgcaagggaag 780
 tggagcaatg gttcaccacg cagaccgagg agctgaacaa gcagggtgga tccagctcag 840
 agcagctgca gtccctaccg gcggagatca tccagctgag acgcacagtc aacgccttg 900
 agatcgagct gcaggcccag cacaacctgc gagactctct ggaaaaacacg ctgacagaga 960
 gtagggcccc ctacagctcc agctgtctcc aggtgcagag cctgatcacc aacgtggagt 1020
 ccagagctgg ggagatccgc agtgacctgg agcggcagaa ccaggagtac cagggtgctgc 1080
 tggatgtgctg tgcccggctg gagtgtgaga tcaacacata ccggagcctg ctggagagcg 1140
 aggactgcaa tctgcccagc aatccctgtg ccacgaccaa cgcgtgcagc aagcccatcg 1200
 gaccctgtct ctccaatccc tgtacctctt gtgtccctcc tgccccctgc acacctgtg 1260
 cccacgccc ccgctgtggg ccctgcaatt ccttcgtgag ctagaacctt ggggaatgcca 1320
 gaggagcaag gatgcagggc ccaggactcc agagctgtga cctggctctg gttcaacaaa 1380

aggggcctga	aaacatcatt	tgcatggctg	gagttgcccc	cgtaaggcag	ccaagaaact	1440
cacccaaagc	ctgtagcctc	cccaactact	ccagactgtc	ctgctcacc	tttcttctct	1500
gggggtctgt	tccttcctat	gctcaccag	agaactctct	gatgtgccag	tgggcctccc	1560
ttttaacctc	ctaataaata	tcatttcctt	ggcaaaaaaa	aaaaaaaaaa	aaaaaa	1616

<210> 351

<211> 6673

<212> DNA

<213> Homo sapiens

<400> 351						
aagaccatgg	tcctgggtatt	taagactttt	cacaacctgg	actcaatgca	actttccggg	60
gcttggggat	aatgtctcca	ttataaatat	caacacaact	agactatttt	ccattttcca	120
aatgtttgat	tgtgtttatt	ttgttctcta	tgagagaagc	tcattcccca	accctttata	180
aaaaatatca	ttcaaaacat	at ttggaaaa	tcccctactc	catgaagtct	ttttccggtc	240
tctcagtgag	ctctcttcca	cctcgaaatc	tttgagctgt	tcttttaaaa	aaaaaaaaata	300
cttcctttta	ctgtcttcat	aatatcaaga	tcatttactt	ttttatcttt	cttattaaaa	360
tctaaaaatct	ccttcttaca	agacagcata	gatgtgcgtt	tgttccgcac	tgggcactct	420
acaaatatct	atcaaaacaa	acaaatcatg	at ttttccct	ttcttcaatg	tgcttgattg	480
actaatattt	taggttttgc	tgcatgggga	acattcagag	gtaggaaaag	aatgtgggag	540
tgagagagac	ttgcaggaca	ttttaggagc	ctttagttct	tgattatttc	atagacataa	600
gctgacagaa	ggggaaaagat	ttcacagcca	cagaaaagtg	gctgcttgaa	gaagaccttg	660
ttttctctgt	tttccaggac	cctgcagtga	tggaagaaa	gaggttaggg	cctctttcat	720
gagctcatta	actctttata	ggaaacaaaa	accactgact	aatagagtga	ttgtataaca	780
attgacataa	atattaatga	ggaaaatgcc	agttttcttg	caccaacacc	cactaaggct	840
tatataaggt	ctacaggaga	aggaagattt	tggtgtcaag	cagatccaac	tgtgggcaaa	900
gcaggatcct	gccttttagc	accatgactt	ctgaccattg	cagttccctc	ctcagcgggc	960
aggtttcaga	ggccaacgct	gcctctctgt	gcctcttgcc	taatgtggca	catgccaatc	1020
gagtcctgt	ggggctcgact	ccctctggcc	gcctcagcct	ctgtctgccc	ccaacctgcc	1080
acaccacttg	tcccttgcca	gggacctgcc	acattcctgg	caacatcgga	atctgtgggg	1140
cctaccgcga	aaacaccctg	aacggccacg	agaaggagac	catgcagttc	ctaaaacgacc	1200
gcctggccaa	ctacctggag	aaggtgccc	agctggagt	ggacaatgca	gaactggaga	1260
ccaaactcca	tgagaggagc	aagtgccacg	agtcagcgt	gtgccgaaac	taccagtcct	1320
acttctgcac	catccaggag	ctccagcaga	aggtgaggtt	tgccgtgcac	cagatcaggg	1380
gtcaggaatc	tgcttactgc	ctgtcggcca	aatccggccc	accacctgct	tttgcaaaata	1440
aagtttttatt	ggttcatggc	catgctcatg	catttgatg	ttgtctgcag	ctgcttttgt	1500
actacagtgg	cagagtccag	tcattgtaat	ggagactgta	gggtctgcaa	agcctaaagt	1560
atttactatc	tgacccttta	caaaaaaaga	ttactgacce	tggttcagca	gtggattttt	1620
tttttctttt	aatgtgggaa	gagaatctct	tgagtgaagg	tgaatgggaa	tttgtaaagg	1680
atagagtga	gaatttatca	ctctaggatt	ctgagttcat	gcttacttaa	cttcagcaca	1740
taaaatttct	aatcgtagt	cacaaaaaat	atgctatttt	catgaaaacc	atgcaaaaac	1800
cgtgctgagt	ttatgaaagt	tgcaagtatac	tgaaactttc	tggtgcagta	aacaggggcaa	1860
aaggaatatt	tcctaacatc	cttgccaagg	cagtgtctat	ccacacaaca	gcataacctt	1920
tcttatgcat	attctattgt	cacctttgat	tatccagtta	aagcttttga	agagcctaca	1980
ttcttagttt	tggagacaag	aagacaagga	atgtcaaaat	aggggttaca	gaaacctggc	2040
tagattcaga	gaagacctgt	ggggagggtg	gacaaccaga	ggaaagattc	tttctttaga	2100
acagatcceta	ctttatctaa	aacattcata	gccagtcctc	tggtctgtgg	cctagttttt	2160
tttttttttt	tttgagaca	aagtctcgct	ctgtcaccca	ggctggagt	cagtgggtgca	2220
atctcagctc	actgcaaact	ctgcctccca	ggttcaagt	attctcatgt	ctcagcttcc	2280
tgagttagctg	ggattacaag	tggtgcgcc	cactcctagc	taacttttat	at ttttagta	2340
gagatgggtg	ttcaccatgt	tgcccaggct	ggctctgaac	tctgacctc	aggtgatcca	2400
tctgccttgg	tctcccaaag	tgccgggatt	acaggcatga	gccactgcgt	ccggccagat	2460
cttcttattt	atattgggct	aagcatcata	tctggcaaaa	tgaaagcaag	tctttgttat	2520
atgttcagtt	tgctactgtc	ttccatctcc	tggttccttt	gactctatgt	cttcatcctt	2580
ttccaagaag	tctcttgcac	atcttctctc	ccacaccaca	aaagcatctc	ttgcacgttt	2640
gggagtttgt	gttgctcagg	cggatgctgt	aggttcaact	tcagccaata	aaacttctct	2700
tcacctgagg	ctataggtgt	ctctggggtc	agtaagtca	ttactgagcc	tactttctta	2760
cccagatcc	tgtgcaccaa	atcggagaac	aataggctgg	ttgtgcaaat	agacaatgcc	2820
aaattggctg	cagatgactt	caggaccaag	tgagttgggg	ttggacaggg	atgggaagga	2880
gccaaagtgg	agttgggggt	ggatgggggt	gggacaatgc	caagttggct	gcttctgtct	2940
cagtgtggcat	cggatgtcat	tgaccagac	cccaaccag	tagttatagc	agaagagaac	3000
aaagggcatt	aagctcaaga	tcctgaaaaa	ctatccgctc	tccagtgggt	tagcataaac	3060

agttttacaac	atgtgctaga	atgcatcatc	cacctggtaa	gcaacttgtg	aagcaggcgg	3120
gcagggatag	aatctcctcc	acaggtgggg	accctgaggg	ttgggggtgct	ggtgtgactt	3180
gccagaagcc	atgtgggtac	cgagtgccag	agctggggact	tggccttaaa	ttttgtacca	3240
aattttcctt	tcttgaagca	atttcctgtg	aaactgttgc	cttaataaag	atatgtttct	3300
gtgctgcagc	ttgattaatt	tgtgagtgct	gataattcat	agcagaaatc	atgctccata	3360
gcctaagatg	aaaacatgtg	aaagtcaaag	ggttgacacc	acctgaggag	ggtctaccct	3420
gggtgctgga	agggcattgt	gttttatcat	ctttcttcgg	ggcactgtgc	aagtctcact	3480
cttctagagc	taaagaaagc	catttccttc	ctctcatgct	ggcaatgtgg	cttttactct	3540
aatagggaat	ccagggctcc	tttgggtatg	gggcttgtag	agaggggcct	gcagtgtatt	3600
cactgtgttg	caaatgcctg	gttactttgc	cacctccctt	ttggggcatt	gtgtgtaaa	3660
gcaggtgctg	gctgtgtgtc	catcacagta	tcctcagtac	cagctgtctc	ccttggttca	3720
tctcaggtgc	ttagtattga	ctgagtgagg	aacatccctg	tgctttctcg	gctttgagca	3780
cactacacag	gataagccaa	ctcacaatta	gatggcaca	ggcaggccag	tggacttaca	3840
gctgcgagct	gggagtcag	tcctgggtgc	ccttcctgcc	ctctaactgt	cactcctgca	3900
ctttccctgt	tacaggtacg	agagagagcg	ctcgctgcaa	cagctgggtg	aggtctgacat	3960
ctgtggcctg	cgcagggtgc	tagacaacct	cacctcgc	aagtgtgacc	tggaggccca	4020
gctggagctc	ctgaaggagg	agctgctttg	cctcaagaag	aaccatgagc	aggtgtgtga	4080
cccttggtgt	gatgcattga	gactttctcg	aggtgaattc	aggctcatct	ggggggaaaa	4140
aacggaggct	tccttctgct	tgggattgaa	gctttgcagg	tgagctctgg	cttttggtgg	4200
gagattgctt	ctcatccaca	ctcctctggaa	gctgctaggc	tgggtgcagg	agcggtttat	4260
cttcagagga	gcacagggaa	attactgggg	aggatggaaa	gtgggagttg	agagtttggg	4320
tgaagggcag	ttggggggccc	tgcaggcggg	tcatactcct	ctgatgccta	caggaagccc	4380
acactctaag	gggtcagctg	ggagacaagc	tcgggataga	gctggacatt	gagccacca	4440
ttgacctgag	tagagttctg	ggggagacgt	gaggccagta	cgaggccatg	gtggagacca	4500
atcgccagga	tgtggagcag	tggttccaag	ccagggtgag	ggggactgct	aagcagtggg	4560
gattggcctc	catctgggca	ggtaggtgac	catgtttctc	tatgctccag	tctgaaggca	4620
tcagcctgca	ggccatgtcc	tgtctgagg	agctgcagtg	ctgccagtc	gagatcctgg	4680
agttgagacg	ctcgggtgaac	gccctggagg	tggagcttca	ggctcagcac	acactgggtga	4740
gtccctctgc	acgcatggga	gacctcagct	ggctcccact	acccatgagt	agctctctgg	4800
ggtcagtaga	ggcctcgaat	accaaccacg	gactcagctt	aaaccttgg	ttcaactctt	4860
ttggaagcac	ttccctgtag	atgtggatgc	tgagtgaatc	aacattaact	taggtcagag	4920
ggctctgatc	ttaaaggctc	accatgaagt	gtgttagtta	ttctggctga	agacagctaa	4980
agggagttag	attgctctct	ggacctggca	atgtcttggg	gtgtcacaa	cttaagaggt	5040
tggagatcca	tgatttttaa	cttgcttctc	cctttcttgg	atattataga	aggactgtct	5100
acagaactcc	ctgtgtgaag	ccgaggaccg	ctaccgcaca	gagctggccc	agatgcagag	5160
cctcatcaac	aatgtggagg	aacagctgtc	tgagatccgg	gctgacctgg	agcggcagaa	5220
ccaggagtag	caggtgctgc	tggatgtgaa	ggcccggctg	cagaatgaga	ttgccacata	5280
ccggaacctt	ctggagagtg	aggactgcaa	gtacgtaccc	tgttgtctat	gtcaacaccg	5340
tgtgcaaaaa	cagataactt	ctcttgggaa	tgacctaaaa	ggagctctgg	aggccagggt	5400
gggtgggcat	tgcagatccc	atctttggag	acaaacttgc	taccactagg	cctgggtgag	5460
taatgcctgc	ctaggcgtag	gtgagggtgt	acaggagttt	tcagggtcatg	gcatttgttt	5520
tgtctgaccac	gttgtgtctc	cagttgctgg	ctactcccat	agagggctaa	aatactgaat	5580
gcccagcaca	ttcagggttt	gctaaattct	ctccaggaga	agtattccaa	taacgagtat	5640
tctttgtgct	catagcattt	aaagtattgc	taagggcag	tgcactgact	ctttcatttt	5700
agttccacaa	tagccctgtg	aaaagcatca	gagggctgat	atacccttt	aagcactaag	5760
gaacactatg	aggggctgtg	tttaaattgga	atcagtggct	gacatctgga	ccattcttgt	5820
tcctctggcc	tttctgcctt	tctctctgct	gtgttccttc	catatgggac	gtgacctgg	5880
cctggcacac	aggtacactg	agttctggcc	ccagctccac	tgtggactgt	gggcacgtca	5940
ttgccccttt	caggcttaga	gggacctcta	aggtctaagg	tcctcttttg	cacttttaatt	6000
ctaaaagtgc	tataatatac	ttttgtcttt	cacataactc	tcatgccaat	gtttcaaaaca	6060
ccttttttct	ctatgcagat	ttccctgcaa	cccggtgtgca	acccagcctc	tcagcactcc	6120
tagtccagcc	cctgcagcct	gcgccccctg	ctcccggggc	acccatgggc	cctgctcatc	6180
aactggatac	tgacacactc	ctcagcccca	gggtgctggga	aaggggaggt	gtcttcagct	6240
cgttaggctt	tgctctgcag	gctgctaac	ctgggccttg	cctccctggc	cagccaggca	6300
ggagactgaa	gagagacagt	gccactctgt	ggataggtgt	ttgaatccag	cagctcagcc	6360
cctatggctg	gatttgtttc	ttccctcaa	gggtgtccca	gtgctccatt	ttctctcttc	6420
tgttgccctc	tgatctctct	gagatggggc	aggcactttt	gtttttatct	tgctattaaa	6480
cttcgcttct	gcagcagaat	gagcccagtg	cagtcacagc	tcagcatctc	cgtcccatgc	6540
tgagagcctt	gctgggaact	ccttgagcca	catgcttctg	tagacggggg	ttgtggctgg	6600
ctcgccagag	tgggtctggg	agatggcaaa	gccagtgaag	gctagagtta	aaaatgggac	6660
tgccggccaaa	gtg					6673

<210> 352

<211> 1986

<212> DNA

<213> Homo sapiens

<400> 352

tggggcctga	atcaactgct	ggtgtttggt	gagcagaaac	agtgagtctc	tgacttccca	60
ccaacagcta	acctgatatg	gaagagccaa	gaggcatctc	agatttgctca	acattgcttt	120
aatgagctga	ggaacttctc	atggtaaaact	cagcagctga	gtaacaggat	gatggcacca	180
caacaggtag	ataatcaagg	caggagggtca	aagcactgga	gccaacaccc	gcccaggatg	240
gggtataaaa	gggttgggag	gagaggaggc	ttcagtctca	gtggctcagc	cttcccagct	300
gatctgaagc	tcctgtgcag	cctcagccct	acaccatgac	ctccttctac	agcacctcct	360
catgccctct	gggttgcaac	atggctcctg	gagcaagaaa	tgtctttgtc	tctcctatcg	420
atgttgggtg	ccagcctgtg	gcagaggcca	atgctgcctc	catgtgcctc	ttggccaacg	480
tggcacacgc	caacagagtc	cgtgtggggt	cgactccctc	gggcccgcgc	agcctctgtc	540
tgcccccaac	cagtcacact	gcttgtccct	tgccagggaac	ctgtcacatt	cccgccaaca	600
tcggaatctg	tggggcctac	ggcaaaaaca	ccctgaatgg	ccatgagaag	gagaccatga	660
agttcctgaa	tgaccgcctg	gccaactacc	tggagaaggt	gcgccagctg	gagcaggaga	720
atgcagagct	ggagaccaca	ctcctcgaga	ggagcaagtg	ccacgagtc	accgtgtgcc	780
ccgactacca	gtcctacttc	cgtacaatcg	aggagctcca	gcagaagatc	ctgtgcagca	840
aggctgagaa	tgccaggctg	attgtacaaa	ttgacaacgc	gaagctggct	gctgatgact	900
ttaggatcaa	gctggagagt	gagcgctccc	ttcaccagct	ggtggaggcg	gacaagtgcg	960
ggacgcagaa	gctcctggat	gacgcgaccc	tggccaaggc	cgacctggag	gcccagcagg	1020
agtcocctgaa	ggaggagcag	ctctccctca	agagcaacca	cgagcaggaa	gtaaagattc	1080
tgaggagtca	gctgggggag	aagttccgga	tcgagctgga	cattgagccc	accattgacc	1140
tgaacagggt	gttgggggag	atgcgggctc	agtacgaggc	catggtggag	accaaccacc	1200
aggatgtgga	acagtgggtc	caagcccagt	ctgaaggcat	cagcctgcag	gccatgtcct	1260
gctccgagga	gctgcagtgc	tgccagtcgg	agatcctgga	gctgagatgc	acggtgaatg	1320
ccctggagggt	ggagcgccaa	gccagcaca	ccttgaagga	ctgtctgcag	aactccctgt	1380
gtgaagcgga	ggaccgctac	ggcacagagc	tggcccagat	gcagagcctc	attagcaact	1440
tgggaagagca	gttgtctgag	atccggggcg	acctggagcg	gcagaaccag	gagtaccagg	1500
tgctgctgga	cgtgaaggcc	cgggttgaga	acgagattgc	cacataccgg	aactctactc	1560
ccctgcaate	cctgttccac	gcctgcctcc	tgtacttctt	gtccaagctg	tggccctgtc	1620
accggtgggt	ctccctctgg	ccatggagcc	agcatgggga	gatgattctg	aaggcccag	1680
ttaggagatt	gaggctgggt	gcactggggt	caggagtgc	ctcaccttgc	ccagtcttcc	1740
ttcaagacta	gactcactga	ggcattttcc	ctaaatcaac	cggtagcaga	tacttccaag	1800
gagtggctcc	ctgcctatgc	ctctaagctg	tattttttgt	tggttgctaaa	atgttgtaat	1860
tatcttccat	gaaagcaatt	atttttcctg	gtgtctcttc	ttggtacttt	tagttctatt	1920
ccagtgtttc	agaatctcca	aaaatgtaac	tgggttccct	gcattaaatg	gtcaataaac	1980
ctcctt						1986

<210> 353

<211> 2837

<212> DNA

<213> Homo sapiens

<400> 353

tagtcctcct	gctacaccac	tgaccaacag	gaaagtttgt	gtctccagag	tggacacatc	60
cataaagagg	ccaaaccag	tcaaggtcta	agcatctgat	ggctataact	ttgcttcttt	120
gaaagataat	aaaaagcttc	tgacctcca	tcaacagcca	acctgatttc	aaagagccaa	180
gaggcctcag	attcgtcaac	attcctttaa	cgagctgaga	aacttttcat	ggtaaaactca	240
gcagctgagt	aacaggatga	tggcaccaca	acaggtagat	aatcaaggca	ggagggtcaaa	300
gcattggagc	caacacccgc	ccaggatggg	gtataaaaagg	gctgggagga	gaggaggctt	360
cagtctcagt	ggttcagctt	tcccagctga	tctgaagctc	ctgtgcagcc	tcagcccaac	420
accatgacct	cttctacag	cagctcctca	tgcctctgg	gttgccacct	ggctcctgga	480
gcaagaaatg	tctctgtctc	tcccatcgac	attgggtgcc	agcctggggc	agaggccaac	540
attgccccca	tgtgcctttt	ggccaacgtg	gcacatgcca	accgagtccg	tgtgggggtcc	600
actccccctg	gcccgcctcag	cctctgtctg	ccgcctacct	gccacactgc	ttgtcccttg	660
ccagggaacct	gccacattcc	tggcaacatt	ggaatctgtg	gggcctatgg	tgaaaacacc	720
ctgaatggcc	atgagaagga	gaccatgcag	ttcctgaatg	accgcctggc	caactacctg	780
gagaagggtgc	gccagctgga	gcaggagaat	gcggagctgg	aggccacact	cctcgagagg	840
agcaagtgcc	acgagtccac	cgtgtgcccc	gactaccagt	cttacttcca	caccatcgag	900

gagctccaac	agaagatcct	gtgcagcaag	gccgagaatg	ccaggctgat	tgtacaaatt	960
gacaatgcc	agctggctgc	cgatgacttt	aggatcaagc	tggagagtga	gcgctccctg	1020
cgccagctgg	tggaggcaga	caagtgtggg	acacagaagc	tcttgatga	tgcgacctg	1080
gccaaggccg	acctggaggc	ccagcaggag	tccttgaagg	aggagcagct	ctccctcaag	1140
agcaaccacg	agcaggaagt	aaagattctg	aggagtcagc	tgggggagaa	gctccggatt	1200
gagctggaca	ttgagcccac	cattgacctg	aacagggtgc	tgggggagat	gcgggctcag	1260
tatgaggcca	tgttggagac	caaccgccag	gatgtggaac	agtggttcca	agcccagctc	1320
gaaggcatca	gcctgcagga	catgtcctgc	tcgaggagc	tgagtgctg	ccagtcggag	1380
atcctggagc	tgagatgcac	ggtgaatgcc	ctggagggtg	agcgccaagc	ccagcacacc	1440
ttgaaggact	gtctgcagaa	ctccctgtgt	gaagccgagg	accgcttcgg	cacggagctg	1500
gcccagatgc	agagcctcat	cagcaacgtg	gaggagcagc	tgtctgagat	ccgggcccag	1560
ctggagcggc	aaaaccagga	gtaccagggtg	ctgctggacg	tgaagaccgc	gctggagaat	1620
gagattgcc	cgtaccggaa	ccttctggaa	agcaggagct	gcaaactccc	ctgcaatccg	1680
tgctccacgt	ctccctcctg	cgtgactgcc	ccctgtgctc	ctcgcccaag	ctgtggcccc	1740
tgaccacact	gtgggcccac	ctgtggagcc	agcaccaccg	gaagccgatt	ctgaattcct	1800
gtggacccac	aggggctggc	taaggcgagg	gatacccaaa	gagagatgct	tgttatacct	1860
ttagaaaatc	tggcttctaa	ctttctgtat	gtataggcct	gtccaaaggc	tatgagatac	1920
caggggacagt	ggaatcctga	tggaaatcct	tcctttcctg	ctcttggttt	tcccagggtg	1980
gctctatgcc	ctcagtggct	ggattgcagc	cacccatggg	ggctcagaat	atctggattg	2040
gagaggcata	aggttgaaaa	gcattttgga	gtaggaacac	ggcatgattt	aaaattgcac	2100
ttgcacttca	agaacaccaa	ctttaacttg	aaatTTTTat	agtttatgac	aaaggaagtg	2160
aagaacagac	ttcactgtct	gagatttccc	acatttcttg	ggttgtttct	aacattggca	2220
gcctggatta	tggccctagg	gagagggaaa	tagaatcaga	attgtacctg	accctgtcct	2280
ttctaattcc	cttctcctat	cctcctgcct	ccctatcttg	gaaactgatt	aagtggaaac	2340
tttctctgta	tcaaatcctg	agttttctct	acttcagggt	ttctagcttt	gacaaaggac	2400
caggcttgcc	ttttctgtgg	caacacagcc	tcttacatat	ggcttccata	gcttcttgct	2460
atgtgaaagg	aactttcaga	ttaagaaatt	tctctctttt	ttctctataa	attctgactc	2520
tccagacttg	tctggctata	acccctgtcc	ctgtctaat	ctccagctct	aaaatctaaa	2580
caatgacttc	atTTTTtct	agtactttct	cctgaagtat	tgaacctat	tgattcaatg	2640
ggtagagatt	tgttaagtat	gatgtgcttc	ccctcttctc	cttcatactc	tctacttcc	2700
ttaccatgat	tcagccacac	tggcctttct	gttccttgga	catgcctgga	gacctgtccc	2760
tgctcttctc	tctctctggg	gtgctcttcc	ccctccttat	aaatgttcag	gtcagcggaa	2820
atgttccttc	ctctgag					2837

<210> 354

<211> 1708

<212> DNA

<213> Homo sapiens

<400> 354

ggcggcatgg	ggtctgtaga	catccaggta	gctgtggctg	aggagaaagg	gcctctccaa	60
catgacatcc	tcctgctgtg	tcaccaacaa	cttgcaagcc	tctctcaaga	gctgcccccg	120
gcctgcctcg	gtctgttcca	gcggcgtgaa	ctgccggcct	gagctgtgcc	tgggctatgt	180
ctgccagccc	atggcatgcc	tgcttcgggt	ctgcctgccc	accaccttcc	ggccagccag	240
ctgcctctcc	aaaacctatc	tatccagttc	ctgccaggca	gccagtggca	tctccggctc	300
catggggccc	ggcagctggg	acagcgaagg	ggccttcaat	ggcaatgaga	aggaaacct	360
gcagttcctt	aacgaccgcc	tggccagcta	cctgacgagg	gtgcggcagc	tggagcagga	420
gaatgcggag	ctggagagca	ggatccaaga	ggcctctcac	tcccagggtg	tcaccatgac	480
tcctgactac	cagtctcatt	tcaggaccat	tgaggagctc	cagcagaaga	ttctgtgtac	540
caaggcagag	aatgccagga	tggttgtgaa	cattgataat	gcaaactgg	ctgccgatga	600
cttcagggcc	aagtacgagg	cagagctggc	catgcggcag	ctgggtggagg	ccgacatcaa	660
tggcctgcgc	aggatcctgg	atgatctcac	tctgtgcaag	gctgacctgg	aggcccagggt	720
tgagtccctg	aaggaggagc	tgatgtgcct	caaaaagaac	catgaggagg	aagtgcggtc	780
ccttcgatgc	cagcttgggg	accgccttaa	catcgagggtg	gacgctgcac	ccccggtgga	840
cctgaccagg	gtgctggagg	agatgcggtg	tcagtacgag	gccatggtgg	aggccaaccg	900
cagggagcgtg	gaggaatggg	tcaatatgca	gatggaggag	cttaaccaac	agggtggccac	960
aagctctgag	cagcttcaga	actaccagtc	agacatcatt	gacctgagac	gcacggtcaa	1020
cacgctggag	atcgagctgc	aggcccagca	cagcctgagg	gactccctgg	aaaacacgct	1080
gacggagagt	gaggcccgtc	acagctccca	gctggcccag	atgcagtgca	tgatcaccaa	1140
cgttgaggcc	cagctgggtg	agatccgggc	tgacctggag	cggcagaacc	aggagtacca	1200
gggtgtgctg	gacgtccggg	cccggctgga	gggagagatc	aacacgtacc	ggagcctgct	1260
ggagagcgag	gactgcaagc	tgcctgttaa	cccatgtctc	actccttctc	gcaccacctg	1320

tgtgccctcc	ccatgcgtga	cccgacacgt	ctgtgtgcca	cgcactggtg	gcatgccttg	1380
ctcacccctgc	ccccagggcc	gctactgaag	tccctttgtg	ccagtggatc	ctggagggcc	1440
tggggctggg	cagcctggta	ttcagtggcc	accagaagag	cagggccagc	cccggtcagc	1500
aaggaagacc	ctgagcagga	ccgtggatca	cctgcaacaa	gctctgatac	tccaggggat	1560
acttaagccc	tcatcacttc	aaaactgcct	cttttttcca	tgggtgaact	gttctctttg	1620
gtgatgtttc	tggttgtctg	tgctgcctca	aagagcgtgt	gttcttagtt	aactggcaaa	1680
tagagctgta	ctcagtggcc	ttgcaaac				1708
<210>	355					

<211> 2051

<212> DNA

<213> Homo sapiens

<400>	355					
tgggctcaaaa	tgacaggtcc	ctttgaagaa	ctgacagga	cttgggtcttc	ccagtgatgt	60
gggggtgggtg	agatgagtct	tgacatagta	atggggctcc	tattttatga	gactggtaaa	120
ttttcacagg	aaactaaata	acaggttaat	gaggggtttt	aatagaaagt	ggtgttaact	180
ttaatgagga	gaaaacactt	tgtaaaggcc	aaccaatgcc	caactggggca	gagatataaa	240
tctggggtaa	ggagctgctt	ctctgctttg	gggtgtctgg	cctcagagac	ctatcaattg	300
catctgagtt	gcagggggcca	tggcttccaa	atgcctcaag	gccggcttct	cttctgggtc	360
tctcaagagc	ccaggagggg	ccagtggggg	ctccactcgt	gtgtccgcaa	tgtactccag	420
cagctcttgc	aagcttccaa	gtctctccc	tgtggccaga	agtttctctg	cctgctcagt	480
gggtctgggc	agaagcagct	acagggccac	cagctgcctc	cctgctctct	gcctccctgc	540
tggaggcttc	gctaccagct	acagtggggg	tgggggctgg	tttggggagg	gcatcctcac	600
tggcaatgag	aaggagacca	tgcaatccct	gaacgaccgc	ctggccggct	acctggagaa	660
ggtgcgtcag	ctggagcagg	agaacgccag	cctggagagc	cgcacccgtg	agtgggtgta	720
gcagcaggtc	ccctacatgt	gccctgacta	ccagtccctac	ttccggacca	tcgaggagct	780
ccagaagaag	actctatgca	gcaaggctga	gaatgccagg	ctgggtgggtg	agattgacaa	840
tgccaaattg	gctgcagatg	acttcaggac	caagtatgag	acggagggtg	ccctgcggca	900
gctgtgtggag	tcagacatca	acggcctgcg	caggatcctg	gatgacctga	ccctgtgcaa	960
gtctgacctg	gaggcccagg	tggagtccct	gaaggaggag	ctgctctgcc	tgaagaagaa	1020
ccatgaggag	gaagtgaact	cactgcgctg	ccaacttggg	gaccgcctca	atgttgaggt	1080
ggacgtgcc	ccacctgttg	acctgaaccg	agttctggag	gagatgaggt	gccagtatga	1140
aaccctgggtg	gagaataacc	gccgggatgc	tgaagactgg	ttggacaccc	agagtgagga	1200
gctgaaccag	caggtggtgt	ccagctcaga	gcagttgcag	tcctgccagg	cagagatcat	1260
cgagctgaga	cgcacggtca	acgccctgga	gattgagctg	caggctcagc	acagcatgag	1320
agatgctttg	gaatccaccc	tggcagagac	ggaggcccg	tatagctccc	agctggccca	1380
gatgcagtgc	atgatcacca	acgtggaggc	ccagctggcc	gagatccggg	ctgacctgga	1440
gcggcagaac	caggagtacc	aggtgctgct	ggacgtccgg	gcccggctgg	agtgtgagat	1500
caacacgtac	cggggcctgc	tggagagtga	ggacagcaag	ctcccctgta	acccatgtgc	1560
acctgactac	tcaccctcca	agtcatgcct	tcctgtctt	cctgcggcct	cctgcgggtcc	1620
tagtgagacc	cgcacaaact	gcagccccc	ccccatttgt	gtgccctgcc	cagggggtcg	1680
gttctgagag	cgggtgaccc	agatggccat	ggctattgtc	tccagggctt	gaacttggcc	1740
tctaccctaaa	cttaaccctt	gtagcccaat	cccctctctt	cgcgcagagc	ccaggcccag	1800
ggtctggctg	aaaaggcttt	ctgcaataac	atgccctaaa	gtttctcaga	gcctgtcaca	1860
aaggccggct	gcccccaaag	gtctcaactc	ctcatcattt	caatgggtgc	caggggtctct	1920
gttctcaggc	tgcctcctgg	gtcaggtttt	ccttctaggt	gctgttccgg	tggattctga	1980
aatgcagtag	agggcttttg	ttggcagaac	aataaagtgc	atttgctcag	gcccctgatg	2040
cctaacttgc	a					2051
<210>	356					

<211> 1404

<212> DNA

<213> Homo sapiens

<400>	356					
atggccaccc	agacctgcac	ccctaccttc	tccactgggt	ctatcaaggg	cctctgtggc	60
acagcaggcg	gcatctctcg	gggtgcctcc	atccgttctg	tgggtcctcg	caggggtcccc	120

agtctcgccg	gtgctgcagg	gtacatctct	tctgctaggt	cgggcctctc	tggccttggg	180
agctgcttgc	ctggctccta	cctgtcttct	gagtgccaca	cctctggctt	tgtggggagc	240
gggggctggt	tctgagaggg	ctccttcaac	ggcagcgaga	aggagactat	gcagttcctg	300
aacgaccgcc	tggccaacta	cctggagaag	gtgctgcagc	tggagcgagg	gaacgcggag	360
ctggagagcc	gcatccagga	gtggtacgag	tttcagatcc	catacatctg	cccagactac	420
cagtcctact	tcaagaccat	cgaagatttc	cagcagaaga	tcctgctgac	taagtctgag	480
aatgccaggc	tggctcctga	gattgataat	gccaaagctgg	ctgctgacga	cttcoggacc	540
aagtatgaga	cagagctgtc	tctgctggcag	ctagtggagg	ccgacatcaa	cggcctgcgt	600
aggatcctgg	atgagctgac	cctgtgcaag	gctgacctgg	aggctcaggt	ggagtcctctg	660
aaggaggagc	tgatgtgcct	caagaagaat	cacgaggagg	aagtcagtg	actccgttgc	720
caacttgggg	accgactgaa	tgtggagggtg	gacgctgctc	ccccagtga	tctcaacaag	780
atcctggagg	atatgagatg	ccagtagcag	gccttggtgg	agaataaccg	cagagatgtg	840
gaggcctggt	tcaacaccca	gactgaggag	ctgaaccagc	aggtggtgtc	cagctcggag	900
cagctgcagt	gctgccagac	ggagatcatc	gagctgagac	gtacgggtcaa	cgcgctagag	960
attgagctgc	aggctcagca	cagcatgcgg	aattccttgg	aatccaccct	ggccgaaacc	1020
gaggcccgt	acagctccca	gctggcccag	atgcagtggc	tgatcagcaa	cgtggaggcc	1080
cagctgtctg	agatccgctg	cgacctggag	cggcagaacc	aggagtacca	ggtgttactg	1140
gacgtcaagg	cccggctgga	gggagagatc	gctacctacc	gccacctgct	ggagggagag	1200
gactgcaagc	ttcctcccca	accttgtgcc	acggcatgca	agcctgttat	tagagttcct	1260
tctgtccccc	cggtgccctg	tgtccctctc	gtgccctgca	ccccggctcc	ccaggttggc	1320
actcagatcc	gcaccatcac	cgaggagatc	agagatggga	aagtcatctc	ctccagggag	1380
cacgtgcagt	cccgcccgct	gtga				1404
<210>	357					

<211> 1693

<212> DNA

<213> Homo sapiens

<400>	357					
cacagtcctc	ggcccaggcc	aagcaagctt	ctatctgcac	ctgctctcaa	tcctgctctc	60
accatgagcc	tccgcctgca	gagctcctct	gccagctatg	gaggtggttt	cgggggtggc	120
tcttgccagc	tgggaggagg	ccgtggtgtc	tctacctgtt	caactcgggt	tgtgtctggg	180
ggatcagctg	ggggctatgg	aggcggcgtg	agctgtggtt	ttggtggagg	ggctggtagt	240
ggcttttgag	gtggctatgg	aggtggcctt	ggaggtggct	atggaggtgg	ccttggaggt	300
ggcttttggtg	ggggttttgc	tgggtggcttt	gttgactttg	gtgcttgtga	tggcggcctc	360
ctcactggca	atgagaagat	caccatgcag	aacctcaacg	accgcctggc	ttcctacctg	420
gagaagggtgc	gcgccctgga	ggaggccaac	gctgacctgg	agggtgaagat	ccgtgactgg	480
cacctgaagc	agagcccagc	tagccctgag	cgggactaca	gcccctacta	caagaccatt	540
gaagagctcc	gggacaagat	cctgaccgcc	accattgaaa	acaaccgggt	catcctggag	600
attgacaatg	ccaggctggc	tgtggacgac	ttcagggtca	agtatgagaa	tgagctggcc	660
ctgcgccaga	gcgtggaggc	cgacatcaac	ggcctgcgcc	gggtgctgga	tgagctcact	720
ctgtctaaga	ctgacctgga	gatgcagatc	gagagcctga	atgaagagct	agcctacatg	780
aagaagaacc	atgaagagga	gatgaaggaa	tttagcaacc	aggtggtcgg	ccaggtcaac	840
gtggagatgg	atgccacccc	aggcattgac	ctgaccgcg	tgctggcaga	gatgaggag	900
cagtacgagg	ccatggcaga	gaggaaccgc	cgggatgctg	aggaatgggt	ccacgccaa	960
agtgcagagc	tgaacaagga	ggtgtctacc	aacactgcca	tgattcagac	cagcaagaca	1020
gagatcacgg	agctcaggcg	cacgctccaa	ggcctggaga	ttgagctgca	gtcccagctg	1080
agcatgaaag	cggggctgga	gaacacgggtg	gcagagacgg	agtgccgcta	tgccctgcag	1140
ctgcagcaga	tccagggact	catcagcagc	atcgaggccc	agctgagcga	gctccgcagt	1200
gagatggagt	gccagaacca	agagtacaag	atgctgctgg	acatcaagac	acgtctggag	1260
caggagatcg	ccacctaccg	cagcctgctc	gagggccagg	acgccaaagaa	gcgtcagccc	1320
ccgtagcacc	tctgttacca	cgacttctag	tgccctctgt	accaccacct	ctaagcctc	1380
tggctcgccg	acttctgatg	tccgtaggcc	ttaaatctgc	ctggcgctccc	ctccctctgt	1440
cttcagcacc	cagaggagga	gagagccggc	agttccctgc	aggagagagg	aggggctgct	1500
ggacccaagg	ctcagtcctt	ctgctctcag	gacccctgt	cctgactctc	tcctgatggt	1560
gggccctctg	tgctcttctc	ttccggctcg	atctctctcc	tctctgacct	ggatagcctt	1620
tggtttctca	acttctctac	cccaaagaaa	agattattca	ataaagtttc	ctgcctttct	1680
gcaaacataa	aaa					1693
<210>	358					
<211>	1709					

<212> DNA

<213> Homo sapiens

<400> 358

```

ggtacctcct gccagcatct cttgggtttg ctgagaactc acgggctcca gctacctggc      60
catgaccacc acatttctgc aaacttcttc ctccaccttt gggggtggct caacccgagg      120
gggttccttc ctggctgggg gaggtggctt tgggtggggg agtctctctg ggggaggtgg      180
aagccgaagt atctcagctt cttctgctag gtttgtctct tcagggtcag gaggaggata      240
tggtgggtggc atgagggtct gtggcttttg tggaggggct ggtagtgttt tcggtggagg      300
cttttgagggg ggcgttggtg ggggttttgg tgggtggctt ggtgggtggc atggtgggtct      360
cctctctggc aatgagaaaa ttaccatgca gaacctcaat gaccgcctgg cctcctacct      420
ggacaaggta cgtgccctgg aggaggccaa tgctgacctg gaggtgaaga tccatgactg      480
gtaccagaag cagaccccaa ccagcccaga atgcgactac agccaatact tcaagaccat      540
tgaagagctc cgggacaaga tcatggccac caccatcgac aactcccggg tcatcctgga      600
gatcgacaat gccaggctgg ctgacatcaa cggcttgccg cgagtcctgg atgagctggc      660
cctgcgccag ggcgttgagg ctgacatcaa cggcttgccg cgagtcctgg atgagctggc      720
cctggccagg actgacctgg agatgcagat cgagggcctg aatgaggagc tagcctacct      780
gaagaagaac cacgaagagg agatgaagga gttcagcagc cagctggccg gccagggtcaa      840
tgtggagatg gacgcagcac cgggtgtgga cctgacctgt gtgctggcag agatgaggga      900
gcagtacgag gccatggcgg agaagaaccg ccgggatgtc gaggcctggt tcttcagcaa      960
gactgaggag ctgaacaaag aggtggcctc caacacagaa atgatccaga ccagcaagac     1020
ggagatcaca gacctgagac gcacgatgca ggagctggag atcgagctgc agtcccagct     1080
cagcatgaaa gctgggctgg agaactcact ggccgagaca gagtgccgct atgccacgca     1140
gctgcagcag atccaggggc tcattggtgg cctggaggcc cagctgagtg agctccgatg     1200
cgagatggag gctcagaacc aggagtacaa gatgctgctt gacataaaga cacggctgga     1260
gcaggagatc gctacttacc gcagcctgtc cgagggccag gatgccaaga tggctggcat     1320
tggcatcagg gaagcctctt caggaggtgg tggtagcagc agcaatttcc acatcaatgt     1380
agaagagtca gtggatggac aggtggtttc ttcccacaag agagaaatct aagtgtctat     1440
tgcaggagaa acgtcccttg ccactcccca ctctcatcag gccaagtgga ggactggcca     1500
gagggcctgc acatgcaaac tccagtcctt gccttcagag agctgaaaag ggtccctcgg     1560
tcttttattt cagggtcttg catgcgctct attccccctc tgccctctccc caccttcttt     1620
ggagcaagga gatgcagctg tattgtgtaa caagctcatt tgtacagtgt ctgttcagt     1680
aataaagaat tacttttctt tttgcaaat                                     1709

```

<210> 359

<211> 1407

<212> DNA

<213> Homo sapiens

<400> 359

```

cggaatcgc agcttctgag accagggttg ctccgtccgt gctccgcctc gccatgactt      60
cctacagcta tcgccagtcg tcggccacgt cgtccttcgg aggcctgggc ggcggctccg      120
tgcgtttttg gccgggggtc gcctttcgcg cgccagcat tcacgggggc tccggcggcc      180
gcggcgatc cgtgtcctcc gcccgctttg tgtcctcgtc ctctcgggg gcctacggcg      240
gcggctacgg cggcgtcctg acccggtccg acgggtgctt ggcgggcaac gagaagctaa      300
ccatgcagaa cctcaacgac cgcctggcct cctacctgga caaggtgcgc gccctggagg      360
cggccaacgg cgagctagag gtgaagatcc gcgactggta ccagaagcag gggcctgggc      420
cctcccgcga ctacagccac tactacacga ccatccagga cctgcgggac aagattcttg      480
gtgccaccat tgagaactcc aggattgtcc tgcagatcga caatgcccg ctggctgcag      540
atgacttccg aaccaagttt gagacggaac aggtctctgc catgagcgtg gaggccgaca      600
tcaacggcct gcgcagggtg ctggatgagc tgacctggc caggaccgac ctggagatgc      660
agatcgaagg cctgaaggaa gagctggcct acctgaagaa gaaccatgag gaggaaatca      720
gtacgttgag gggccaagtg ggaggccagg tcagtgtgga ggtggattcc gctccgggca      780
ccgatctcgc caagatcctg agtgacatgc gaagccaata tgaggtcagt gccgagcaga      840
accggaagga tgctgaagcc tggttcacca gccggactga agaattgaac cgggaggtcg      900
ctggccacac ggagcagctc cagatgagca ggtccgaggt tactgacctg cggcgacccc      960
ttcagggtct tgagattgag ctgcagtcac agctgagcat gaaagctgcc ttggaagaca     1020
cactggtcga aacggaggcg cgctttggag ccagctggc gcataatccag gcgtgatca     1080
gcggtattga agcccagctg ggcgatgtgc gagctgatag tgagcggcag aatcaggagt     1140

```

accagcggct	catggacatc	aagtcgcgcc	tggagcagga	gattgccacc	taccgcagcc	1200
tgctcgaggg	acaggaagat	cactacaaca	atttgtctgc	ctccaaggtc	ctctgaggca	1260
gcaggctctg	gggcttctgc	tgctctttgg	aggggtgtct	ctgggtagag	ggatgggaag	1320
gaagggaccc	ttacccccgg	ctcttctcct	gacctgccaa	taaaaattta	tggtccaagg	1380
gaaaaaaaaa	aaaaaaaaaa	aaaaaaa				1407

<210> 360

<211> 2352

<212> DNA

<213> Homo sapiens

<400> 360

cctgcactt	gggagccggt	agcactccta	tcactgcttc	tcaaccctgt	agctaccagc	60
tgtgtcatga	gctgcagaca	gttctcctcg	tcctacttga	ccagcggcgg	gggtggcggg	120
ggcggcctgg	gcagcggggg	cagcataagg	tcttctctaca	gccgcttcag	ctcctcaggg	180
ggccgtggag	gagggggccg	attcagctct	tctagtggct	atgggtgggg	aagctctcgt	240
gtctgtggga	ggggaggcgg	tggcagtttt	ggctacagct	acggcggagg	atctgggggt	300
ggtttttagtg	ccagtagttt	aggcgggtgc	tttgggggtg	gttccagagg	ttttgggtgt	360
gcttctggag	gaggctatag	tagttctggg	ggttttggag	gtggcttttg	tggtgggtct	420
ggaggtggct	ttggtgggtg	ctatgggagt	gggtttgggg	ggtagggggg	ctttggaggt	480
ggtgctggag	gaggtgatgg	tggtattctg	actgctaatt	agaagagcac	catgcaggaa	540
ctcaattctc	ggctggcctc	ttacttggat	aagggtgcagg	ctctagagga	ggccaacaac	600
gacctggaga	ataagatcca	ggattggtac	gacaagaagg	gacctgctgc	tatccagaag	660
aactactccc	cttattataa	cactattgat	gatctcaagg	accagattgt	ggacctgaca	720
gtgggcaaca	acaaaactct	cctggacatt	gacaacactc	gcatgacact	ggatgacttc	780
aggataaagt	ttgagatgga	gcaaaacctg	cggcaaggag	tggtgctga	catcaatggc	840
ctgcccagag	tgctggacaa	tctgaccatg	gagaagtctg	acctggagat	gcagtatgag	900
actctgcagg	aggagctgat	ggccctcaag	aagaatcata	aggaggagat	gagtcagctg	960
actgggcaga	acagtggaga	tgtcaatgtg	gagataaacg	ttgctcctgg	caaagatctc	1020
accaagaccc	tcaatgacat	gcgtcaggag	tatgagcagc	tcattgctaa	gaacagaaaag	1080
gacatcgaga	atcaatatga	gactcagata	accagatcg	agcatgaggt	atccagtagt	1140
ggtcaggagg	tgcagtccag	tgccaaggag	gtgaccagc	tccggcacgg	tgtccaggag	1200
ttggagattg	agctgcagtc	tcagctcagc	aagaaagcag	ctctggagaa	gagcttggaa	1260
gacacgaaga	accgctactg	tggccagctg	cagatgatcc	aggagcagat	cagtaacttg	1320
gaggcccaga	tcactgacgt	ccggcaagag	atcgagtgcc	agaatcagga	atacagcctt	1380
ctgctcagca	ttaagatgcg	gctggagaag	gaaatcgaga	cctaccacaa	cctccttgag	1440
ggaggccagg	aagactttga	atcctccgga	gctggaaaaa	ttggccttgg	aggctcaggga	1500
ggaagtggag	gcagttatgg	aagaggatcc	aggggaggaa	gtggaggcag	ctatggtgga	1560
ggaggaagtg	gaggtggcta	tgggtggagga	agtgggtcca	ggggagggaag	tggaggcagc	1620
tacggtggag	gaagtggttc	tggaggaggt	agtggaggtg	gctatggtgg	aggaagtgga	1680
ggtggccata	gcggaggaag	tggaggtggt	catagtggag	gaagtggggg	caactatgga	1740
ggaggaagtg	gctctggagg	aggaagtggg	ggtggctatg	gtggagggaag	tgggtccagg	1800
ggaggaagtg	gaggcagcca	tgggtggagga	agtgggtttg	gaggtgaaag	tggaggcagc	1860
tacggaggcg	gtgaagaagc	gagtggaagt	ggtggcggct	acggaggagg	aagcggaaaa	1920
tcattcccatt	cctagtcttc	ttcctcaaaa	tctggtgacc	aagatgagac	aaaaggcttc	1980
ctttcgcat	actagagcct	ctgtaaaact	ctcctgcccc	gccccagct	gagcatcccc	2040
agatgggcag	actcccgatg	aagcctgctt	attggatcct	gacatcagga	atagctggca	2100
acaagcccct	gtgcccgttt	gggactgaac	tgacttggca	tatgtgctct	ggctttccat	2160
tggcttccaa	ccctgcttgg	ctttggatgc	cttcagggtt	cccagacag	acctctttcc	2220
tctctctggc	ctgggagctc	tcacaccctg	cacgatcttg	actataataa	agcttcccta	2280
ctgcaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	2340
aaaaaaaaaa	aa					2352

<210> 361

<211> 1634

<212> DNA

<213> Homo sapiens

<400> 361
 acccgagcac cttctcttca ctcagccaac tgctcgctcg ctcacctccc tcctctgcac 60
 catgactacc tgcagccgcc agttcacctc ctccagctcc atgaagggtc cctgcgccat 120
 cggggggcggc atcggggggcg gctccagccg catctcctcc gtccctggccg gagggctctg 180
 ccgcgcccccc agcacctacg gggggcgccct gtctgtctca tcctcccgct tctcctctgg 240
 gggagccctac gggctggggg gcggtatgg cggtggcttc agcagcagca gcagcagctt 300
 tggtagtggtg tttggggggag gatattggtg tggccttggg gctggcttgg gtggtggctt 360
 tgggtgggtggc tttgctgggtg gtgatgggtc tctgggtgggc agtgagaagg tgaccatgca 420
 gaacctcaat gaccgcctgg cctcctacct ggacaagggt cgtgctctgg aggaggccaa 480
 cgccgacctg gaagtgaaga tccgtgactg gtaccagagg cagcggcctg ctgagatcaa 540
 agactacagt ccctacttca agaccattga ggacctgagg aacaagattc tcacagccac 600
 agtgagacaat gccaatgtcc ttctgcagat tgacaatgcc cgtctggccg cggatgactt 660
 ccgcaccaag tatgagacag agttgaacct gcgcatgagt gtggaagccg acatcaatgg 720
 cctgcgccagg gtgctggacg aactgacctt ggccagagct gacctggaga tgcagattga 780
 gagcctgaag gaggagctgg cctacctgaa gaagaaccac gaggaggaga tgaatgccct 840
 gagaggccag gtgggtggag atgtcaatgt ggagatggac gctgcacctg gcgtggacct 900
 gagccgcatt ctgaacgaga tgcgtgacca gtatgagaag atggcagaga agaaccgcaa 960
 ggatgccgag gaatggttct tcaccaagac agaggagctg aaccgcgagg tggccaccaa 1020
 cagcgagctg gtgcagagcg gcaagagcga gatctcggag ctccggcgca ccatgcagaa 1080
 cctggagatt gagctgcagt cccagctcag catgaaagca tccctggaga acagcctgga 1140
 ggagaccaa ggtcgctact gcctgcagct ggcccagatc caggagatga ttggcagcgt 1200
 ggaggagcag ctggcccagc tccgctgcga gatggagcag cagaaccagg agtacaagat 1260
 cctgctggac gtgaagacgc ggctggagca ggagatcgcc acctaccgcc gcctgctgga 1320
 gggcgaggag gccacctct cctcctccca gttctcctct ggatcgagat catccagaga 1380
 tgtgacctcc tccagccgcc aaatccgcac caaggctcat gatgtgcacg atggcaagggt 1440
 ggtgtccacc cagagcagg tccttcgcac caagaactga ggctgcccag ccccgctcag 1500
 gcctaggagg ccccccgtgt ggacacagat cccactggaa gatccctct cctgcccag 1560
 cacttcacag ctggacctg cttcaccctc accccctcct ggcaatcaat acagcttcat 1620
 tatctgagtt gcat 1634

<210> 362

<211> 1688

<212> DNA

<213> Homo sapiens

<400> 362
 acagcacgct ctcagccttc ctgagcacct ttccttcttt cagccaactg ctcactcgct 60
 cacctccctc cttggcacca tgaccacctg cagccgccag ttcacctcct ccagctccat 120
 gaagggctcc tgcggcatcg gaggcggcat cggggggcggc tccagccgca tctcctcctg 180
 cctggccgga gggctctgcc gtgccccag gtgccccag ggcggcctgt ctgtctcctc 240
 tcgctctccc tctggggggag cctgcgggct gggggggcggc tatggcgggt gcttcagcag 300
 cagcagcagc tttggtagtg gcttcggggg aggatattgt ggtggccttg gtgctggctt 360
 cggtgggtggc ttgggtgctg gctttgggtg tggttttgct ggtgggtgat ggttctgggt 420
 gggcagtgag aaggtgacca tgcagaacct caatgaccgc ctggcctcct acctggacaa 480
 ggtgcgtgct ctggaggagg ccaacgccga cctggaagtg aagatccgtg actggtacca 540
 gaggcagcgg ccagtgaga tcaaagacta cagtccctac ttcaagacca tcgaggacct 600
 gaggaacaag atcattgcgg ccaccattga gaatgcgcag cccattttgc agattgacaa 660
 tgccaggctg gcagccgatg acttcaggac caagtatgag caggaactgg ccctgcccag 720
 gactgtggag gccgacgtca atggcctgcg ccgggtgttg gatgagctga ccctggccag 780
 gactgacctg gagatgcaga tcgaaggcct gaaggaggag ctggcctacc tgaggaaagaa 840
 ccacgaggag gagatgcttg ctctgagagg tcagaccggc ggagatgtga acgtggagat 900
 ggatgctgca cctggcgtgg acctgagccg catcctgaat gagatgcgtg accagtacga 960
 gcagatggca gagaaaaacc gcagagacgc tgagacctgg ttcctgagca agaccgagga 1020
 gctgaacaaa gaagtggcct ccaacagcga actggtacag agcagccgca gtgaggtgac 1080
 ggagctccgg aggggtgctcc agggcctgga gattgagctg cagtcccagc tcagcatgaa 1140
 agcatccctg gagaacagcc tggaggagac caaaggccgc tactgcatgc agctgtccca 1200
 gatccaggga ctgattggca gtgtggagga gcagctggcc cagctacgct gtgagatgga 1260
 gcagcagagc caggagtacc agatcttgct ggatgtgaag acgcccgtgg agcaggagat 1320
 tgccacctac cgccgcctgc tggagggcga ggatgccac ctttccctccc agcaagcatc 1380
 tggccaatcc tattcttccc gcgaggtctt cactcctcc tcgtcctctt cgagccgtca 1440
 gacccggccc atcctcaagg agcagagctc atccagcttc agccagggcc agagctccta 1500
 gaactgagct gcctctacca cagcctcctg cccaccagct ggctcacct cctgaaggcc 1560

cggggtcagga	ccctgctctc	ctggcgagct	tcccagctat	ctccccctgct	cctctgctgg	1620
tggtgggcta	ataaagctga	ctttctgggt	gatgcaaaaa	aaaaaaaaaa	aaaaaaaaaa	1680
aaaaaaaa						1688

<210> 363

<211> 1512

<212> DNA

<213> Homo sapiens

<400> 363

ctcctctcca	gcccttctcc	tgtgtgcctg	cctcctgccg	ccgccaccat	gaccacctcc	60
atccgccagt	tcacctctc	cagctccatc	aagggctcct	ccggcctggg	ggcgggctcg	120
tcccgcacct	cctgccggct	gtctggcggc	ctgggtgccg	gctcctgcag	gctgggatct	180
gctggcgggc	tgggcagcac	cctcgggggt	agcagctact	ccagctgcta	cagctttggc	240
tctggtggtg	gctatggcag	cagctttggg	ggtgttgatg	ggctgctggc	tggagggtgag	300
aagggcacc	tgagaaacct	caatgaccgc	ctggcctcct	acctggacaa	ggtgctgccc	360
ctggaggagg	ccaacactga	gctggagggt	aagatccgtg	actggtacca	gaggcaggcc	420
ccggggcccg	cccgtgacta	cagccagtac	tacaggacaa	ttgaggagct	gcagaacaag	480
atcctcacag	ccaccgtgga	caatgccaac	atcctgtctc	agattgacaa	tgcccgtctg	540
gctgctgatg	acttccgcac	caagtttgag	acagagcagg	ccctgcccct	gagtgtggag	600
ccgacatca	atggcctgcg	caggggtgctg	gatgagctga	ccctggccag	agccgacctg	660
gagatgcaga	ttgagaacct	caaggaggag	ctggcctacc	tgaagaagaa	ccacgaggag	720
gagatgaacg	ccctgcgagg	ccagggtgggt	ggtgagatca	atgtggagat	ggacgctgcc	780
ccaggcgtgg	acctgagccg	catcctcaac	gagatgcgtg	accagtatga	gaagatggca	840
gagaagaacc	gcaaggatgc	cgaggattgg	ttcttcagca	agacagagga	actgaaccgc	900
gaggtggcca	ccaacagtga	gctggtgcag	agtggcaaga	gtgagatctc	ggagctccgg	960
cgcaccatgc	aggccttgga	gatagagctg	cagtcccagc	tcagcatgaa	agcatccctg	1020
gagggcaacc	tgccggagac	agagaaccgc	tactgcgtgc	agctgtccca	gatccagggg	1080
ctgattggca	gcgtggagga	gcagctggcc	cagcttcgct	gagagatgga	gcagcagaac	1140
caggaataca	aaatcctgct	ggatgtgaag	acgcggctgg	agcaggagat	tgccacctac	1200
cgccgctctg	tgaggggaga	ggatgcccac	ctgactcagt	acaagaaaga	accggtgacc	1260
accgctcagg	tgcttaccat	tgtggaagag	gtccaggatg	gcaaggtcat	ctcctcccg	1320
gagcagggtc	accagaccac	ccgctgagga	ctcagctacc	ccggccggcc	accaggagg	1380
cagggagcag	ccgccccatc	tgccccacag	tctccggcct	ctccagcctc	agccccctgc	1440
ttcagtcctc	tccccatgct	tccttgccct	atgacaataa	agcttgttga	ctcagctaaa	1500
aaaaaaaaaa	aa					1512

<210> 364

<211> 1753

<212> DNA

<213> Homo sapiens

<400> 364

cagccccgcc	cctacctgtg	gaagcccagc	cgccccctcc	cgcgataaaa	aggtgaggag	60
tgtccccgag	gtcagcgagt	gcgcgctcct	cctcgccccg	cgctagggtc	atccccggcc	120
agccaccatg	tccatccact	tcagctcccc	ggtattcacc	tcgcgctcag	ccgccttctc	180
ggggcgcggc	gcccagggtg	gcttgagctc	cgctcgcccc	ggcgcccttg	gcagcagcag	240
cctctacggc	ctcggcgcct	cgcgcccgcg	cgtggccgtg	cgctctgcct	atggggggccc	300
ggtggggcgc	ggcatccgcg	aggtcaccat	taaccagagc	ctgctggccc	cgctgagggt	360
ggagcggcag	ccctccctcc	agcgggtgcg	ccaggaggag	agcagcaga	tcaagacctc	420
caacaacaag	tttgctcctc	tcacgcacaa	ggtgcgggtt	ctggagcagc	agaacaagct	480
gctggagacc	aagtggacgc	tgctgcagga	gcagaagtcg	gccaagagca	gccgcctccc	540
agacatcttt	gaggcccaga	ttgctggcct	tcggggctcag	cttgaggcac	tgagggtgga	600
tgggggccgc	ctggaggcgg	agctgcggag	catgcaggat	gtggtggagg	acttcaagaa	660
taagtacgaa	gatgaaatta	accgccgcac	agctgctgag	aatgagtttg	tggtgctgaa	720
gaaggatgtg	gatgctgcct	acatgagcaa	ggtggagctg	gaggccaagg	tggtgacctc	780
gaatgatgag	ataaacttcc	tcaggaccct	caatgagacg	gagttgacag	agctgcagtc	840
ccagatctcc	gacacatctg	tggtgctgtc	catggacaac	agtcgctccc	tggaacctga	900

cgccatcatc	gctgaggta	aggcacagta	tgaggagatg	gccaaatgca	gccgggctga	960
ggctgaagcc	tggtaccaga	ccaagtttga	gaccctccag	gcccaggctg	ggaagcatgg	1020
ggacgacctc	cggaataccc	ggaatgagat	ttcagagatg	aaccgggcca	tccagaggct	1080
gcaggctgag	atcgacaaca	tcaagaacca	gcgtgccaa	ttggaggccg	ccattgcccga	1140
ggctgaggag	cgtggggagc	tgccgctcaa	ggatgctcgt	gccaagcagg	aggagctgga	1200
agccgcccctg	cagcggggcca	agcaggatat	ggcacggcag	ctgcgtgagt	accaggaact	1260
catgagcgtg	aagctggccc	tggacatcga	gatcgccacc	taccgcaagc	tgctggaggg	1320
cgaggagagc	cggttggctg	gagatggagt	gggagccgtg	aatatctctg	tgatgaattc	1380
cactggtggc	agtagcagtg	gcggtggcat	tggtgctgacc	ctcgggggaa	ccatgggagc	1440
caatgccctg	agcttctcca	gcagtgcggg	tccctgggctc	ctgaaggctt	attccatccg	1500
gaccgcatcc	gccagtgcga	ggagtgcggg	cgactgagcc	gcctcccacc	actccactcc	1560
tccagccacc	accacaatc	acaagaagat	tcccaccctc	gcctcccctg	cctggtccca	1620
agacagtggg	acagtctgga	aagtgatgtc	agaatagctt	ccaataaagc	agcctcatcc	1680
tgaggcctga	gtgatccacg	tgaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1740
aaaaaaaaaa	aaa					1753

<210> 365

<211> 9721

<212> DNA

<213> Homo sapiens

<400> 365

aaactccctt	cccctcggcc	aagcagagtg	gagaggggta	caggaaggag	ggacgcttac	60
gagaagagga	ggatgagct	gagtcctgag	atagaagaga	agagaaagtt	tttgcccaaa	120
gggacacagg	atgaatgata	aattaacaat	agaataaata	gaacaaataa	tgaataaata	180
aacattttaca	cagttcttat	taagtगत	gtaggggcct	aaatgctttc	tggtcattat	240
ctcattagat	cctggcaacg	gctctcagtg	cttactatta	ttatcgctat	tttgccctgtg	300
agaaaactga	ggctcagaaa	ggttattcag	ctgcccagg	tcatgacatg	aacctgcggg	360
actgacttca	gaggccccac	actctcgaca	cacgcacaca	ctcgccccac	acacgggtgcc	420
cgctcggggg	gaccggggct	atgggactgg	gaccgaagtg	gaggccggat	ccaacaaggc	480
aaagctcgga	gtcccggcgg	agggggcgac	aggtggaggg	tttactcgc	actgaccgca	540
gcgcacgggc	agcggggctg	accaggcgct	tcccggcccc	ataaaactcg	ggcgggagcg	600
gaacgccgtt	ttatgcaggc	ggccggggcg	cctggctcgc	tttcatcccc	ggctccgcga	660
ggcgcgaggg	ccgagccctc	caagctcgta	aacgccttgg	ccgcgagctc	cctccccggg	720
cccgcgggcc	gtcatataag	gcgcagcgcc	ggcttggggg	ccagccgccc	gccccctgcg	780
ccaccgcacc	atgtcctgcc	tctactcccc	cctcagcgcc	ccctgcgggg	tccgcgcctt	840
cagctgcattc	tcggcctgcg	ggccccggcc	cgcccgctgc	tgcatcaccc	ccgcccccta	900
ccgcggcgctc	tctgtctacc	gcggcctcac	cggaggcttc	ggcagccaca	gcgtgtgcgg	960
gggcttccgc	gccggctcct	gcggacgcag	cttcggctac	cgctccgggg	gcgtgtgcgg	1020
accagccccc	ccatgcattc	ccaccgtgtc	ggtaaacgag	agcctcctca	gcgccctcaa	1080
cctggagatc	gaccccaacg	cacagtcgct	gaagcaggag	gagaaggagc	agatcaagtc	1140
cctcaacagc	aggttcgcgg	ccttcatgga	caaggtgggt	gtcctggatc	acacctttcc	1200
tgaacctgga	agtccctgga	ggagatggaa	attcccagtg	gtctctctag	aaatggggaa	1260
tgaggatggc	tgatatttta	tataatgtta	ggcgttgccg	gcccataata	ttaaataaca	1320
ttgaaacacg	tggtaaagaa	atacatcttc	tttaatgtct	gtttcaatcc	ttaagattag	1380
gtgggaaaaa	aatatcactg	gatgctaattg	tttttagcat	ctctctaata	cttgcttccc	1440
tcctgcttct	aataaagaga	gcaagccccg	gcttcagaa	tgtctaggac	aactgtttct	1500
actagaatth	aatgttctgt	aatttccctt	tatgtatgcc	tagtaatgat	ggttttgcat	1560
ctctgggtggc	catatgaagt	tactctttta	acccatacag	tgtaaatgtt	aattgaatcc	1620
acttatagat	aaattaggag	taaaatagta	tatgggatgg	caaaatcctg	aagtcagcct	1680
tggtgtgata	cagaagagaa	aggaggcaga	gagagggtga	ggggctggcc	caaggggcca	1740
cagagagtgg	gtgccagaa	agggttccaa	gccaggcccc	tctccaactc	tccagcccc	1800
gggctagaag	gtccacagct	tgggatccca	gctgccccac	tccctctaga	aggggctggg	1860
tcacctcaac	aggcactgca	cgctggagag	gtgacccagg	agcggtcgt	ggaatggaga	1920
ctggcccagg	agcaggccac	ctggcctcca	tgctcagtta	agttcctcta	ctgacgcatt	1980
gtgtggcact	gggcagaggc	ttcccttctc	cacccagtg	gcttccctac	cagggtctgtg	2040
tgtggtgcag	tgtgtgagct	ggccatgact	ctgaaaggga	aaatggggcc	caaggcagcc	2100
atgagacccc	atagccaaga	ccacctgaaa	ttatgccatg	taatatcagc	agtcctccact	2160
ccccatgtct	gcaagttcca	acctgggaat	tcccagctgc	actcatggag	ttggatgaaa	2220
aggaaacccg	ggcttaaaag	gaaggagaca	tctcagctcc	agctcaaagt	tacgagaagt	2280
ggaaaactgg	aagccaaggg	ccctagtttg	tttctgtaca	tcctttctgg	ccagcacaat	2340
gtattgttgc	catgtgttcc	tccagtttca	gtgaaatcca	ggaaaagcgt	acaagcctca	2400

cttccctagg	gtcctcacc	tctctgtttt	ccaaaacctc	ccccattca	cattacatat	2460
gtctggcccc	cagagacata	tgacacagtg	tccaacataa	gaatttaggc	cacctaggac	2520
catgccccac	actccccaat	gcctcttcag	gccccaggcg	tctgtcttgg	taagagccta	2580
gcctctatga	cctccccagc	taggaagccc	ttcccacctt	gaccatctgt	tcaatcaaat	2640
gttcaccaag	ccaagggctg	gctatgagga	catcaataaa	taagccatag	gccctgcctt	2700
gagggagctt	atagtgaag	gcattctccc	tactctatcc	ctcccacac	tgctctacat	2760
tcttttcttc	caggaagtct	tccctaattg	tactacccc	ctacccccat	ctgtccgccc	2820
ctagcctgac	agtaaccag	cacagcccac	aggcctctca	gtctgtcgct	catcccatcc	2880
aggccacct	ggacagaccc	tcacttagcc	ctgaataagc	aattatgaaa	caaggattct	2940
ccagctgcat	cctcaggcca	ggagagacca	gcaggggcca	tgtgggtctac	cccttgcttc	3000
tgacatctt	actgccagtt	ctgtcttgac	tctggctgtt	ccccaggag	ggctggggat	3060
attggctcct	ccaaccaaca	tttctccac	ttccacacca	ggtgcacttc	ctggagcagc	3120
agaacaagct	gctggagaca	aagctgcagt	tcttccagaa	ccgtgagtg	tgcgagagca	3180
acctggagcc	tctgtttgag	ggctacaact	ctgcgacggg	aggccgagtg	catggaagcc	3240
gacagtggga	ggctggcctc	agagctcaac	cacgtgcagg	aggtgctgga	gggttacaag	3300
aagaagtaag	tgagtgagg	ggaggggttg	gagaaattaa	atgggattaa	gtcaaagtat	3360
gatagatttg	ggttcgacca	taagaggaac	ttcccaacag	gaagaaaata	gtacaataat	3420
cctgtggggg	gggggggaatt	tcttttctag	actgggagtt	taaacattgg	agattctgaa	3480
ctgctccagc	tacttcatca	ttatgtttat	ttcattaatt	catcaaact	tttattgagc	3540
atctactcaa	tgttgtaggt	gctatgttgg	gctctgagtg	ggaaaggagt	aaggaagtaa	3600
gaaggaggag	aaaggagagg	taccagaact	ggcgagggtt	cctgccccaa	aggagttaca	3660
gccagaaac	agagaggagg	tcttcgaaaa	tgtgcagggc	ccccaccctg	accacatca	3720
ggaatgaaag	tccctgaaat	agaaagagct	ttgagtaaca	tgggttggtt	tgaatgccca	3780
gaagaaagg	atggacaagt	tcccttcagt	ccaacacttt	tttgattctt	gtgaccacct	3840
ccaaaagatc	cagttcccg	aatagtgttg	cctgtgcctt	cattcccatt	tttttcttc	3900
cccagatctg	agccttgtgt	gttttgtccc	caggtatgaa	gaagaggtgg	cactaaaggg	3960
cactgtctgag	aatgaatttg	tggccttgaa	gaaggtgagt	gacccagaa	tccttgtccc	4020
ctaactcaga	atggaggcca	gagacagaag	ggtcctagac	ccaaagggtt	gagctgggag	4080
accttgacta	acatcaggct	ctctgtagtt	cggagagggt	gagggactcc	cttagaatca	4140
cacggccag	cttctttctg	ttcctttccc	cagtgtccca	gtgctccctg	gggtccctct	4200
gcagcagaat	acactgcctg	cttcaggcag	ggcaatatc	tccccatct	gaggtgtctg	4260
ccatatagcc	accagatttt	cacctccttc	agcctgcgc	ctggcataga	gtaggcacc	4320
tgtaaatatt	tgcgagtga	agagcaggtg	aattatagac	aatggctgca	tcctcaggcc	4380
agcaacagct	cagaaccaca	ggcaggggca	gtgaccgtca	ttccttgcc	cttagacttg	4440
actctgtaca	agtgcctgga	ctctcattag	gcccttcag	ccacctccat	atgaggaaag	4500
caggggttat	tgtgagaaaa	tgaggtgcag	agggttaagg	ggctgctcag	agtgacactg	4560
acttggagg	gacagagttg	agccctgagc	cctcttctga	ccacagatct	agattatctt	4620
ccatgagatt	ccagagcgga	gaggggtggg	gcatcattag	aatttaccga	ctgtacacca	4680
gatcttaagt	tttgggtgata	gtgcatgaca	tggattctag	agaaatcatc	ccagtggttg	4740
ccagaggaag	tacctgcaaa	cctcagtgte	ccctccctt	acccaaacct	gctcttgacg	4800
ccactactaa	ctgtataagg	ggcttcacca	cggcatgata	ccaggcactg	ggatgagcac	4860
gtacagaggg	tttccaggga	agctgtcag	cctgatgggg	tgccctccc	tggtaggaaa	4920
aaaacaagg	ttctgaattg	tctcccagtg	caattcctgt	gccaccttct	cccctttaagg	4980
atgtggactg	tgctacctg	cgcaaatcag	acctagaggc	caacgtggag	gccctgacct	5040
aggagatcga	cttctgagg	cggtatatg	aggaggtg	gggtcacaaa	gcagcggggc	5100
agcaaggagg	atatgagtta	gacattggaa	aatacttgte	accattcagc	ttctgacct	5160
atggtgggac	aaggggagaa	accccaggca	ggttcacat	gagcaggtga	agaagtgtgg	5220
cttgacctcc	cactgccatg	ccccaggcaa	cctgggtgtt	ctggttacta	aagtgacaat	5280
tgccacaagg	tggtaaaact	tggtcctaga	ccaaagggtt	caagctggaa	ggtcctgatt	5340
aaaatcaggc	actgggcctc	agacatggac	tctctacctc	caagtcctct	aggctcagga	5400
ctctgggctt	gaggagtcct	gaggggttcc	caggggttag	gtggaagact	gtaactggga	5460
gggtggggct	tcagacatcg	aagaagcagg	gaaaggggac	aagggtgat	gatgaggggt	5520
ggctaccaag	agtgggctc	tggtctaaga	agctcttgcc	actccccatc	tcctgcagga	5580
gatccgcgtt	ctccagtcgc	acatctcaga	cacctcagtg	gtcgtcaaga	tggacaacag	5640
tcggggactg	aacatgcact	gtgtcatcac	tgagtcataa	gctcagtagc	atgacattgc	5700
cacccgcagc	cgggcccagg	ccgagtcctg	gtaccgcagc	aaggtgagtg	gcacaggaca	5760
cctgcctgct	agacatggca	gttggaggga	tgcaagggtac	ctattaaata	ggcttccttt	5820
tctggggatt	ctgggtcccta	cggatgggaa	gataagggtc	gcctctctga	ggttggggta	5880
gcagggcagg	actgccatgt	tggtttgcac	aggctgagca	ctgcacaacc	tgcaaatca	5940
tccgtgggtg	cctgaatgga	tgggaggtcc	cacctgagc	ctcataagca	actctacttc	6000
cccagtggtga	ggagatgaag	gccacgggtga	tcaggcacgg	ggagaccctg	cgccgcacca	6060
aggaggagat	caacgagctg	aaccgcatga	tccagaggct	gacagccgag	gtggagaacg	6120
ccaagtgcc	ggtatgggag	cccagcccac	ccctcaggtg	aggaagagag	tggggttagc	6180
cctcagcaga	gggatttggg	ttagacccct	tggcagtggt	tggggacaag	ggcaaacacc	6240
cagcatgagg	acagacagcc	tcctccatgg	taaacgttct	ccattctcgc	tgaatggagg	6300
cattggggca	atatggaggg	aatgaggtgc	ttcaagggca	gagtggggca	gaggaaatag	6360

caccagtcta	aggggcagga	aacctgggct	ctcaacaag	ctctgccact	agtttgccat	6420
gagacttggg	aaaggcattt	aacctctctg	gcctgttggt	ctagatcagt	gatcacacat	6480
tcagacatca	atgggggttag	taaatgagcg	aagcaagcaa	gctgttccca	aggcacttgg	6540
gtatgatagg	gactatggta	aactggaaag	cacaaaaggc	agggctaggc	agatccaact	6600
gaggcaggcc	atgcagaaat	gcagggtccag	tgtggccaga	tcctctgac	ttttgaaaga	6660
agccaagaat	ttcaattatt	gtgttaaatt	tccaaaattg	aagacactgt	gcaaacatgc	6720
ctgggagcac	taatttgcaa	cccttggcct	aacaaataga	caaggcctct	ttttcttctg	6780
ctagtccagt	gtcagtgggt	acctggcctc	tgacctgaa	gccagaacag	agatccttaa	6840
taacctctcc	ttgcctccca	gaactccaag	ctggaggccg	cgggtggcca	gtctgagcag	6900
cagggtgagg	cggccctcag	tgatgcccgc	tccaagctgg	ccgagctgga	gggtgccctg	6960
cagaaggcca	agcaggacat	ggcctgcttg	atcaggaggt	accaggaggt	gatgaactcc	7020
aagctggcct	ggactttgag	atcgccacct	acaggcgcct	gctggagggc	gaggagcaga	7080
ggtgaggacc	acagctgtgg	ggagggtgtc	ccctcagttt	ccccaggca	gtgctgcagt	7140
gcttcaacac	ccaggagcat	gtctgcatat	tatttacttg	gaatgtgcat	caacgctaata	7200
tggaggagag	aatttgcagg	ttaaacagat	tccaccagct	ttgctcccca	caactaattt	7260
ctgtctcttt	gctttcccta	taagggtgtg	tgaagggcgt	ggtgctgtaa	atgtctgtaa	7320
gtaatccatt	ttgtgggtcc	tgaataaaca	gcttgggggt	ctgggcaggc	aaactttttc	7380
ttagagcttc	agatagtaaa	aactttaggc	tcgtggggcca	tgtagtctct	gcctcaactg	7440
ctccactccg	ttgtcatgta	aagcagccac	agccaaaggc	aatacttgaa	gaagcggtat	7500
gactgggttc	caagaaaact	tgattgacaa	acaggaagcc	tgcatgtggc	cgtagtgtgc	7560
agactctaaa	aggaaaagatg	gagtggggca	tagtagtctt	atagtaactt	aattagctac	7620
agtcattgtac	cacataagga	cttttaggtc	aaggatggat	ggaatatagg	acagtgtcc	7680
cattagatta	taccatattt	ttactctact	ttcctagggt	tagctatgtt	cagatcacaca	7740
aatacctacc	atggtgttac	agttgccttt	agtcttcagt	acagtccacat	gctgtacaga	7800
ttttagtctt	agaagcaaca	ggctatgcta	tagggtaaac	ttgtcaaacc	cctgaccaga	7860
aggctgcata	cagcccagga	cggctttgaa	tgtggcccag	cacaaaattg	taaacattct	7920
taaaacttac	gagattttcg	tgtgtgtgat	tttttaaagc	tcacagcta	ccgttagtat	7980
tagtgtatct	tatgtgtggc	ccaagacaat	tcttctctct	ccagtgtggc	ccagggaagc	8040
caaaagattg	gacacccttg	gggcctgggt	gtggtggcct	acacctgtaa	tcccagcact	8100
ttggggaggc	aaggcagggt	gatcacttga	ggtcaggagt	ttgagatcag	cctggccaac	8160
atgggtgaaac	ccgctctcta	ctaaaaataa	aaaaatttagc	cgggcaagggt	gatggacacc	8220
tgtaatccca	gctactaggg	aggctgaggc	aggagaatca	cttaaaccca	ggaggcagag	8280
gttgagcaga	gccgagatcg	cgccactgca	ctccagctctg	ggcgatagag	agagactccg	8340
tctcaaaaaat	aaaaataaaa	aataaaaaag	gttggccacc	cttgccacag	agcccagggtg	8400
tgtagttaggc	tacaacatgt	aggtttgcgt	atgtgcactc	catgatgttc	gcacaatgac	8460
aaaatcattt	aatgctgtat	ttctcagaac	atgtctctgt	tgtgaggcga	agcatggcta	8520
tgtctgccta	tagagaggac	ctgggctaac	agtgtatcaa	ggacgcctga	ggctaagact	8580
gcagggaagga	gtgcccattgt	gagggtttga	ggggcgcgca	tagaaaacaga	ggggagaagc	8640
tctgagcaga	aggggtctct	ggccgccagg	agactgggac	ctgtccctcc	cctctggcag	8700
gtgtcagcag	ctcccgcggc	gggtctctat	gcggggacac	gtgcgtgtcg	ggctcccggc	8760
cgggtgacggg	cagcgtctgc	agtgcctctc	gcagcgggaa	cgtggcggtg	agcaccgggc	8820
tgtgtgcgcc	ctgcggccag	agcagcgcca	gcggcgctc	cgtgcgcttc	gcctgagcgc	8880
ccacttttgt	accgacgcgc	cctcaccagc	agcagcctct	gcctccagag	gcagcccggga	8940
gtcccacagg	tcccagacgc	tggggaagga	gggtctcggg	gcccagcctc	cccatcgggc	9000
cccacgcgcg	gccttctgtg	ctcgcatccc	cgcccgctag	tccttccact	gcttccgaga	9060
gcacagggct	cctagccgcg	agctctccca	acccccgaat	ctaaaggact	gtcctcgag	9120
ccctaggtaa	agaccccggt	ccggaggcct	ggatgcctgt	ggcttctgag	ggacagatgg	9180
gcctggagcc	ccttgggtgtg	gacttgctgt	gccttctaata	ccaatgtctt	ctaatacacg	9240
tgcaggacag	gccacctctc	ctgcctggct	gcctggctcc	ctccctctcc	cctgtgcttg	9300
tctcagcatt	tccagtaaag	tccttgatca	tatgcattgt	gccttgagag	tctctccttc	9360
ctcttgccca	cttgggtcttc	ttagtccggga	gggagagggc	ctggatctcc	tgacaccttg	9420
ggtgggaacc	ccatcactgt	ggctgctggt	ccactttttc	cactctccac	cccagcccc	9480
acctcagcat	ttgaaagtgc	cctgaccata	gggtcaaata	tacagacttc	ctcccagaag	9540
ccaacacatc	ccacatagct	ccccatcca	caccaccacc	atcacccttg	gggtcccaga	9600
cacagagacc	tcctgtggc	ccacagtagc	ccatcatatg	tgtgctgcc	cacatgggca	9660
catttcccca	tgcattggcc	ctgccacaga	acacctgcca	cactcacata	gcacacagac	9720
c						9721

<210> 366

<211> 4721

<212> DNA

<213> Homo sapiens

<400>	366						
tgctagcagt	gagggaaagg	tcagagtcct	cttcttctct	tggttctcatg	tcctccagca		60
gagagtgcgc	atgacttgta	gattgtcttg	cctaggctcc	cgagcggagt	ctgcaaattcc		120
aggtcctgtg	cagccactca	gagatatggt	tatgacccca	ccctcagctg	catcttgccc		180
tcggggccct	ggtctggtgg	ctgctgcac	acggcaagcc	cctgctacca	tggtcctact		240
gggggctttg	gcactggttc	ctgtggacac	agattcagct	accactctgg	cagcacatgc		300
ggggccagca	ctgcctgtaa	caccattgtg	ttgatcaatg	agagcctcct	catgccccctc		360
aacctggaga	ttgcacagtg	cataaagcag	gaggaggaga	agatcaagtg	cctcaacagc		420
aggtttactg	ccttcctcca	caaggtgggt	gtcctggatc	acacccttcc	tgaaccccca		480
ccatgtgcac	aaccaggact	gggcactgag	gaaagaatca	gaggcaggca	agaccctgcg		540
tgcttgaggt	cccagtctga	tggtgagagg	acacagacag	acagacagac	agacagacag		600
acagacagac	agaggcacc	aaggccca	aatactctga	cagttcagat	acggagagct		660
tgtggaggaa	agatgccaaa	tttcaaaatt	tcaatgaatt	tagtttaaag	atcttagttg		720
gattttatat	gcaatttttag	aattgggcag	cccttagaac	tgatcagagg	aactctggct		780
gcactgcggg	cccacaatac	ttatggacag	aaaacagaaa	gtgacacatg	gaaaacagaa		840
gtaacagctg	gattgtttgc	agctggtgtt	tgtgaacatt	tggtgcctg	tgattgactg		900
aagctcagtt	actgtgattg	gctgagactc	agctatttgt	tacaaaggaa	aattctgaag		960
ttaggtttgt	aagggataat	tggaaggaca	gccgagaaa	gaataaggcc	aatagacca		1020
agttcaggca	agctgattta	ctgtcagtc	tgccgggcta	cctcctgaca	aaagcagagg		1080
aggcagccct	gcttataggc	tattgcaagg	tttataggg	catgtattcc	taattccaac		1140
taggaatgtt	ggaattagca	gtttctggcc	aaggatctga	ggtacagtta	ttataggtta		1200
aaagagtgtc	ggccaggcgc	ggtggctcac	gcctgtaatc	tcagcacttt	gggaggctga		1260
gcgggggtag	atcacgaggt	caggagtttg	agaccagcct	gaccaacatg	gtgatcccc		1320
gtctctacta	aaaatacaaa	aattagcttg	gcgtgggtgg	acgcactgtg	aatcccagct		1380
actccagagg	ctgaggcagg	agaattgctt	gaatctggga	ggcagagggt	gcagtgcgtc		1440
gaggttgctg	cactgtactc	cagcctgggt	gacaaagcaa	gattctgtct	caggaaaaaa		1500
aaagtgtctat	agtaccctgg	cacataagtc	aatttgcaag	aaaatctgtt	tggtattttg		1560
gtgcaaatct	gccttgcaat	atactcatta	gtcttgggtc	ttgaatcaca	tgactgggtt		1620
aaagttaaac	aggctcatgag	agcaaatgag	tctggaagtc	taattccgta	ataggacca		1680
ctgctataat	acatcataga	ttgatccctt	atgaaatagc	tactggaagg	cctatgccct		1740
aataatagaa	ctcattttatt	ttctactccc	ctaaactctg	acataactaa	atgctgcaag		1800
gttttaaatgc	attatgocaa	agtatatatt	caccaggtaa	aggaaagcttt	tcaagatcta		1860
tcaactgagg	acaatcaaac	ccttcacaat	ctagaatgca	gagatcaggt	catctggaga		1920
cgatatctga	gaaagactgc	cattgagccc	cattggaggg	ggccatatca	agttcttctc		1980
atcacccact	cttcagcaaa	acttcagggc	cttggaacct	cggctctacat	ctcgcaactc		2040
aaaagggtcc	attcagactc	ttagaactgc	acatccattg	gagaccttaa	gataaagcca		2100
agcagagaag	tttcttccca	gaaacagaca	gtattctaga	tgtggacagc	tttcccaaga		2160
ccatgcatca	agacttctct	gccgtcatgc	aactcttacc	tctcttaatt	tttctcttgc		2220
ttacgccttc	ctcattcact	tgccaggata	atgctgtaat	tccaatttca	taatcagtag		2280
cttctgagag	taattttttt	ttctttttga	gacggagtct	ctattgcccc	ggttgggggtg		2340
cagtggtgtg	atcttggtct	actgcaaacc	tctgtctctt	gggttcaagc	aattctcatg		2400
cctcagcctc	ccaagtagct	gggattactg	gcatgcacca	acacactggc	taatttttgt		2460
attttttttt	tttttttttt	ttggtagaga	tgggatttca	ccatgttggc	catgctggct		2520
acaaactcct	cactgcaggt	gatctgcctg	cctcagcctc	ccaaagtgtc	aagattacag		2580
gagtaggccc	ccatgcccac	ccttctgaga	gtaacttgac	ggagtgttgt	atctgtcatg		2640
tcaaactcaa	atctttacat	tacctacaaa	gtccacctat	tggccaactt	cagcaacatc		2700
cctaattgcaa	ctatttgttc	aaattatagc	tatgttctca	acttaagtca	ctgccccccac		2760
ctcttgacag	agatccatgt	tctccaatcc	cacatctcag	acacctctgt	ggttgtcaag		2820
ctggacaaca	gccaggacct	gaacatggac	tgcatcattg	ccgagatcaa	ggcacagtat		2880
gacgacattg	tcacctgcag	ctgggccaag	gctgagtctt	ggtaccatgg	ctgcctgcca		2940
gatgtggcac	ctgcctgcta	gatgtggcag	tggtggaggc	aggatgtgag	atacctatta		3000
gatagactta	ttttgcctgg	ggattctgga	tagtaggcca	atagctctca	ggttgggggtg		3060
gcaggggcag	actgccatgt	gtggttgcac	agcttaggca	ctgcacaacc	tgcacaatca		3120
tccttaagg	aaggatatac	ccacactgag	cctcaggagc	atctctgctt	ccccacttcc		3180
ggggagatga	aggccacggg	gatctggcac	ggggagactg	tgggctgcac	caaggaggag		3240
atcaaggagc	tgaccacacat	gatccagagg	ctgatggcca	aggtggagaa	tgccaagtgc		3300
caggtatggg	gcactctgtc	ccaaggccag	agagacttat	ggcctaacct	ttgtcacaca		3360
gccctatgtg	gccctacgtg	gatctcagca	tgcattctcc	agtccttttg	tccatgtaga		3420
gtccctgggt	gtggtcagtc	agggagtggc	atgcatgtga	aggcaagagg	cctgtttctg		3480
aggtgtctcc	agctgaatgg	cagactggac	atattcaggt	aatggacaga	gagaccgtaa		3540
cctatcttgt	tctcttctgg	tccccagaa	ctccaagctg	gaggtggagg	tgaccacagtc		3600
tgagcagcag	ggtgaggtgg	cccttagcga	tgaccgctgc	aagctggctg	agctggaggg		3660
caccatgcag	aaggccaggc	agtaccagga	ggtgatgaac	tccaagctgg	gcctcaatgt		3720
gaaggctgcc	tcttcttgcc	aacttctaga	tggtgaggag	cagaggtggg	tgcagcctgc		3780
agagctgggc	ccagagctca	tctgcataga	cctgccccac	tttttagcac	catcacttac		3840

ccagccctca	ctactacttc	tgttttcatc	ttggaaccct	tttaggacct	ctactgggtat	3900
tgagcacagt	ccaaggagcg	gagtccttagt	tgagtcacaca	ggccgatttc	caataggctc	3960
cttgcatgat	ctattaggga	caatggtttg	tctcagagaa	cttggttctct	gagataaaca	4020
atgcccta	ttataacact	taccgatttc	agagttgtat	atacttctgt	catggctgat	4080
ttcaggctgt	tgctgtgact	tcatgtagaa	ttggctagaa	atgtgcacaa	taggctcttg	4140
tgagctgggtg	ggagctgggt	caagaacaac	attgggtggg	gctaggatgg	aatgggtgtct	4200
cacactgaaa	gacaaatagg	aagatatttg	tctcttctct	tagatgaaaa	acctgaggct	4260
tagggagact	gtgggggttg	gggagtcgc	ctgggtgtgga	gttattggga	cagttggaga	4320
gttcttttgt	gtcctgctgc	attttcacag	gctccacttc	ctggggggat	ctgggagagc	4380
ctggcacttg	tggtgttttg	ggacagggtt	gggacgatgc	tgggcctttg	aggggtgctag	4440
acccaggctct	tccctcctct	cactttcttg	gaagggtctg	ggtgacctct	tggttgactg	4500
agttcagagc	tggtgaccac	atgggtctctg	gtgtcattgt	caggaattaa	tgcccagtg	4560
taaagctgac	cttttctctc	ctgcaccagg	ctgtgtgatg	gcacagtg	tgatgaatc	4620
tgtgagta	tctggccctg	aaggagact	ctgaggtttg	ccagtgggac	gaatttttta	4680
gctctgagg	tggaaatacc	aagggaagtgg	ttccattcat	t		4721

<210> 367

<211> 1925

<212> DNA

<213> Homo sapiens

<400> 367

actccaggtc	ccctatcctg	tccctctgcaa	cccaaacgtc	caggaggatc	atgacctgcg	60
gatcaggatt	tggtgggctg	gccttcagct	gcacctcctg	ctgcccggcg	cgccccggcc	120
gctctgcat	caccgcgcgc	ccctaccgtg	gcacctcctg	ctaccgcggc	ctcaccgggg	180
gcttcggcag	ccacagcgtg	tgccggaggct	ttcggggccg	ctcctgcgga	cgcagcttcg	240
gctaccgctc	cgggggcgctg	tgccggccca	gtcccccatg	catcaccacc	gtgtcggtca	300
acgagagcct	cctcacgccc	ctcaacctgg	agatcgaccc	caacgcgcag	tgccgtgaagc	360
aggaggagaa	ggagcagatc	aagtccctca	acagcagggt	cgccggccttc	atcgacaagg	420
tgccgttcct	ggagcagcag	aacaaactgc	tgagacaaa	gctgcagttc	taccagaacc	480
gcgagtgttg	ccagagcaac	ctggagcccc	tgtttgaggg	ctacatcgag	actctgcggc	540
gggaggccga	gtgcgtggag	gccgacagcg	ggaggctggc	ctcagagctt	aaccacgtgc	600
aggaggtgct	ggagggctac	aagaagaagt	atgaggagga	ggtttctctg	agagcaacag	660
ctgagaacga	gtttgtggct	ctgaagaagg	atgtggactg	cgccctacctc	cgcaagtcag	720
acctggaggc	caacgtggag	gccctgatcc	aggagatcga	cttctgagg	cggctgtatg	780
aggaggagat	ccgcattctc	cagtcgcaca	tctcagacac	ctccgtgggt	gtcaagctgg	840
acaacagccg	ggacctgaac	atggactgca	tcatgtccga	gattaaggca	cagtatgacg	900
acattgtcac	ccgcagccgg	gccgaggccg	agtcctggta	ccgcagcaag	tgtagaggaga	960
tgaaggccac	gggtgatcag	cacggggaga	ccctgcgcgc	caccaaggag	gagatcaatg	1020
agctgaaccg	catgatccaa	aggctgacgg	ccgaggtgga	gaatgccaa	tgccagaact	1080
ccaagctcga	ggccgcggtg	gctcagctcg	agcagcaggg	tgaggcagcc	ctcagtgatg	1140
cccgtgcaa	gctggccgag	ctggagggcg	ccctgcagaa	ggccaagcag	gacatggcct	1200
gcctgatcag	ggagtaccag	gaggtgatga	actccaagct	gggcctggac	atcgagatcg	1260
ccacctacag	gcgcctgctg	gagggcgagg	agcagaggct	atgtgaaggc	attggggctg	1320
tgaatgtctg	tgctcagcag	tcccggggcg	gggtcgtgtg	cggggacctc	tgccgtgtcag	1380
gctcccggcc	agtactggc	agtgtctgca	gcgctccgtg	caacgggaac	gtggcggtga	1440
gcaccggcct	gtgtgcgccc	tgccggccaat	tgaacaccac	ctgcggaggg	ggttcctgctg	1500
gcgtgggctc	ctgttgtatc	agctccctgg	gtgtggggtc	ttgcggcagc	agctgcggga	1560
aatgttaggc	accccaactc	aagtcccagg	ccccaggcat	ctttgcctgc	cctgccttgc	1620
ttggcccagt	cagtcaggcg	cctggagaag	tgctcagcta	cttctcctgc	actttgaaa	1680
acccctcca	ctcctggcct	cacatttctc	tggtgtgatc	cccacttctg	ggctctgcc	1740
ccccacagtg	ggaaaggcca	ccctagaaag	aagtccgctg	gcacccatag	gaaggggcct	1800
caggagcagg	aaggggccagg	accagaacct	tgcccacggc	aactgccttc	ctgcctctcc	1860
ccttctcct	ctgctcttga	tctgtgtttc	aataaattaa	tgtagccaaa	aaaaaaaaa	1920

<210> 368

<211> 2108

<212> DNA

<213> Homo sapiens

<400> 368
 tccattcggga cgtctccatc ctcagaacct cctctcttcc ccaaaaagca ccatgacttg 60
 tggatcttac tgtgggtggcc gcgccttcag ctgcatctcg gcctgcgggc cgcgccccgg 120
 ccgctgctgc atcacgcgcg cccctaccg tggcatctcc tgctaccgcg gcctcaccgg 180
 gggcttcggc agccacagcg ccttcggggc ctttcggggc ggctcctgcg gacgcagctt 240
 cggctaccgc tccggggggc tgtgcgggcc cagtccccca tgcattacca ccgtgtcggt 300
 caacgagagc ctctcacgc cctcaacct ggagatcgac cccaacgcgc agtgcggtgaa 360
 gcaggaggag aaggagcaga tcaagtcct caacagcagg ttcgcgccct tcatcgacaa 420
 ggtgcgcttc ctggagcagc agaacaaact gctggagaca aagctgcagt tctaccagaa 480
 ccgcgagtgt tgccagagca acctggagcc cctgtttgag ggctacatcg agactctgcg 540
 gcgggaggcc gagtgcgtgg aggccgacag cgggaggctg gcctcagagc ttaaccacgt 600
 gcaggagggt ctggaggggt acaagaagaa gtatgaggag gaggtttctc tgagagcaac 660
 agctgagaac gagtttgtgg ctctgaagaa ggatgtggac tgcgcctacc tccgcaaatc 720
 agacctggag gccaatgtgg aggccctgat ccaggagatc gacttctctga ggcggctgta 780
 tgaggaggag atccgcttc tccagtccca catctcagac acctccgtgg ttgtcaagct 840
 ggacaacagc cgggacctga acatggactg catcattgcc gagatcaagg cacagtacga 900
 tgacattgtc acccgtagcc gggtgagggc cgagtccttg taccgcagca agtgtgagga 960
 gatgaaggcc acggtgatca ggcacgggga gacctgcgc cgcaccaagg aggagatcaa 1020
 cgagctgaac cgcattgatc agaggctgac ggctgagggt gagaatgcc aagtccagaa 1080
 ttccaagctg gaggtgcgg tggctcagtc tgagcagcag ggtgaggcgg cctcagcga 1140
 tgcccgtgca aagttggccg agctggaggg tgccctgcag aaggccaagc aggacatggc 1200
 ctgctgatc agggagtacc agggaggtgat gaactccaag ctgggcctgg acatcgagat 1260
 cgcacactac aggcgcctgc tggagggcga ggagcagagg ctgtgcgaag gcgtcggtc 1320
 ggtgaatgtc tgcgtcagca gctcccgccg tggcgctgtc tgtggcgatc tctgcgcctc 1380
 cactactgcc cctgttgtct ccaccagagt cagtagcgtc cccagcaaca gcaacgtggt 1440
 ggtgggcact actaacgcct gcgcctccct cgccccgggt ggcgtctgcg gcggcagctg 1500
 taagaggtgc taaggaggct gcgcctccg ccagcgcctg tcgcgctcac tctccaccca 1560
 gccagtacct cgcgcagga gaacgcgcgc cccgcgcgg cctcccaata gccgcgcgc 1620
 gctgcctgca ctctaagcgc tctcccccag tccgctccgg gagccatccc cggtcgcagg 1680
 agtccgggga gggccgggag gcgccatggt ctctctctgt agcctttcct ggtagtcaat 1740
 ttgttgtccc gaggatcat ctttttcttc ctctacctt ctgttttttt ttctcatgtat 1800
 gcattggtct tgccctgagct cttcctcaaa gcttgaggga acgggggagg gcccggaat 1860
 gtccctgtct gcacgacct ggactctgcc catgtgcttt tgccctgtga atggagacgc 1920
 ggaccctgga tagtggttct atgactctgc gagggacagg cccacgcgtg tggggagaa 1980
 atctccttcc ggggctgccc tcaagagctt ctgaaaaact aatgactctg ctgccttctc 2040
 ctttgtcttt gtttactctc gtgtttccaa taaactcatt gtagcgaatc aaaaaaaaaa 2100
 aaaaaaaaaa 2108

<210> 369

<211> 1883

<212> DNA

<213> Homo sapiens

<400> 369
 gttccatcct ctgccatcta ctccactgtt cagacacctc ctaacctccg tcatgacctg 60
 tggcttcaac tccataggct gtgggttccg ccctggaaac ttcagctgtg tctctgcctg 120
 cgggccccgg ccaagccgct gctgcatcac cgccgcccc taccgcggca tctcctgcta 180
 cgcgcgcctc accggggggt ttggcagcca cagcgtgtgc gggggcttcc gcgcgggctc 240
 ctgcggacgc agcttcggct accgctccgg gggcgtgtgc ggaccagcc ccccatgcat 300
 caccaccgtg tcgggtcaacg agagcctcct cagcccccct aacctggaga tagacccaa 360
 cgcgcagtg gtgaagcagg aggagaagga gcagatcaag tccctcaaca gcagattcgc 420
 ggccttcatc gacaagggtg gcttcctgga gcagcagaac aagctgctgg agacaaagct 480
 gcagttctac caaaactgcg agtgctgcca gagtaacctg gagccctgt ttgctggcta 540
 catcgagact ctgcggcggg aggccgagtg cgtggaggct gacagtggga gctggcctc 600
 agagctcaac cacgtgcagg aggtgctgga gggctacaag aagaagtatg aagaagaagt 660
 agcacttcga gccacagcag agaacgagtt tgtggctcta aagaaggatg tggactgtgc 720
 ctacctccgc aagtcagacc tggaggccaa cgtggaggcc ctgatccagg agattgactt 780
 cctgaggcgg ctgtacgagg aggagatccg cattctccaa tcccacatct cagacacctc 840
 cgtgggtgtc aagctggaca acagccggga cctgaacatg gactgcatcg ttgccgagat 900

caaggcacag	tatgatgaca	ttgccacccg	tagccgggct	gaggccgagt	cctgggtatcg	960
cagcaagtgt	gaggagatga	agggcacagt	gatcaggcac	ggggagaccc	tgcgccgcac	1020
caaggaggag	atcaacgagc	tgaaccgcat	gatccagagg	ctgacagccg	aggtggagaa	1080
tgccaagtgc	cagaactcca	agctggaagc	tgcggtggcc	cagtctgagc	agcagggtga	1140
ggcgccctc	agtgatgccc	gctgcaagct	ggccgagctg	gagggcgccc	tgcagaaggc	1200
caagcaagac	atggcctgcc	tgatcaggga	gtaccaggag	gtgatgaact	ccaagctagg	1260
cctggatata	gagatcgcca	cctacaggcg	cctgctggag	ggcgaggagc	agaggctgtg	1320
tgaagggtgt	gaagctgtga	atgtctgtgt	cagcagctcc	cggggtgggg	ttgtgtgcgg	1380
ggacctctgc	gtgtcgggct	cccggccggg	gacgggcagc	gtctgcagtg	ccccctgcaa	1440
cgggaacctg	gtggtagaca	ctggtttgtg	caagccctgt	ggccagctga	acaccacctg	1500
tggagggggc	tccctgcggcc	aggggaggtg	ttaaagtggc	caaaagagag	cagggggagc	1560
cccttctgcc	tgccagacgt	gccactgccc	caccaccagc	tgaaaacagc	agcacatcgc	1620
tggcttttcc	ccttgtgttc	tgagaataca	ccatcggctc	attcccacca	gtggctcctc	1680
cccacctttc	atcccactgg	aaaggggtct	gtggctgggg	aatagaccca	ttccttcccc	1740
tgtctcagcc	ttcagccctt	ccgggggaga	agggccttgc	ttccctggaa	gaagcactgt	1800
gagactgttc	cccctgcctc	tctggcctct	tgtctccctt	tttccaataa	acttgggacc	1860
tgcaaaaaaa	aaaaaaaaaa	aaa				1883

<210> 370

<211> 13464

<212> DNA

<213> Homo sapiens

<400> 370

gcaggttgca	gtttcccttg	cgttctgcct	agcgggagat	tcctatgctc	ataaatggca	60
ttaataatgt	tctctgcctt	tatgttgtca	ggaggcctgt	cccctgccc	ataaaaggca	120
ggagcagtaa	caggcctccc	atgtgagacc	gtgtcatcct	tcaatcctca	gtccagggga	180
ctgtcccgc	gaacagaggc	atggcgagcc	aatcctgcc	catcagctct	ggctgcgggg	240
tcaagaactt	cagctcccgc	tctgccactg	tgcccgaagc	tgggtatcac	agctgtgtca	300
ttggccatggc	ccatcatggg	gtcagccctg	ggggcttagg	ctccaggcgc	ctcggaggct	360
gtggcagtc	gagcctgtgt	acgggtgggt	ctcccggat	cgcggtgagt	tgtagatggc	420
ccctacacag	caggggcagg	tttggctact	gggcaggggg	cctttgcagg	ccagcccac	480
cccgcacac	atctgttacc	atcaacgaga	gcctcctcat	gcccctcaac	ctagagatcg	540
accccaatgc	ccagtgtgtg	aagcatgagg	agaaggagca	catcagggtg	ctcaacaagt	600
ttgtctgcctt	cattgacaag	gtgggtctgt	gagctgtttc	ctgggactgt	ggcttaggaa	660
ggggaaaagg	acttggaaac	cgatgatagg	gtggttctaa	ttctcctgtt	actgactagc	720
acgtggctgt	gagaacgtgg	ctgaatcagg	gtcttggttt	tcaaatgttg	ccatgtcagt	780
caaatgcaaa	atgaatctga	aaccaccaga	cagaagaggg	gtgtttgctg	ctgctgtctca	840
caggcaagca	gcaagcatga	tgtgtgtgca	ccgtccatct	tcccgatctc	accggcacgc	900
agtaggacag	tgtggcagag	cggggcactc	tgccataggc	tgtctgacct	cccgttaga	960
ggagatgcta	ccgtccctag	catggagcag	gagcaggatg	cagaggggtc	agaggctcct	1020
tgctgtctcc	tccgtgggtg	ggacatcata	ggaaggctgt	gaacccttag	gacttctgcc	1080
cgaggcactt	tataccctgc	agcacatgca	tagattaaag	gcagtgagtt	gagaaactta	1140
aagcatggtc	cagggagagg	ctgttgattt	gacttttctg	atgctgcagt	ttcagagtcc	1200
tccctggttga	gtgtatagct	ctggtttcct	ttaaccta	gatgccctcc	ctaggagctc	1260
acagtctttg	ggggaggaca	gccaccaaag	tttaaaggag	gagaagctcg	tcttccaggg	1320
ctgaatgggtg	tgtatatcta	caccctggga	ctgcataaga	aggcacaac	cagggcgatg	1380
gtgggtggaa	gttctgtctt	cagatcaacg	ctacatcaga	agtgggcata	tctgcacaca	1440
cagggtgctgg	gtgtccattg	ttaacatacc	gctggctgtc	cagattactc	ttcccttcca	1500
tcagacaaa	gaagctcact	gtagagttag	gcagggtatt	cattgcacaa	ggacacctag	1560
caagacaggg	ggagggtgaa	atccagccca	ggctttgtct	gcagagccat	gtgccctggc	1620
agggggctgg	aggcatcttt	tcctaatttg	ctcaaaagca	cagtggagac	cctgagagtg	1680
catgtcaca	ggggctctctg	catgtggcct	tttgggcata	acccatgaat	gctgtctctt	1740
ccgttgagag	gaaccagttc	tgggtctggg	gagaggaact	tataccactg	caccaggctg	1800
gcttttccct	cccttggggg	tgctgatggc	caccctcttc	cctccagcct	tcttctctga	1860
ggctccaaac	tgcatagagc	tccagactac	aaagtgcatt	gatattggtg	gtttaatcct	1920
gccagagggc	tgtcccatga	cctgggtctg	catgttgaaa	tccaaggcag	atgccttttg	1980
gataatcaga	gtttttgttc	cttgtccctc	aagcacggac	aattggacag	ttgagggttt	2040
gtaccagggt	tgtactccca	agaggttagg	gttggagaag	aaatcacctg	cttttagggct	2100
ggtaaaatgca	aacttcaacg	ggggcttggg	gggtcacatg	aatgaagcca	aacttgagag	2160
gcattgcccac	ctagagggac	agtagctgct	gctcactcca	gccacaggcc	tacctagcct	2220
tgccagaact	tctggtatgt	caagaggggtc	agagagatcc	agattcttac	ttgaaaccac	2280

tcagttatta	agtgttgcca	actaatcaga	tctctataaa	acagtgtgca	aggcaagtaa	2340
gacatgcctg	tgggcctgat	agggcctgga	gctgccagtg	taccactgct	aatgtatttc	2400
tcctgtcttg	ttttacaatg	caattcagtg	agaatgaggg	aaagtggctc	ggttgggtggc	2460
agagttagag	tgagaggtct	cctaattcct	ggtctgggat	actctgtcct	gggcttcagt	2520
gccccagcac	cagaggtaaag	gaagagtcac	ggatgtgtaca	tttaaaaaatt	gctgtgtgtac	2580
aaatgccac	aaacttagca	acttaaaaca	acacaaattt	actacctaaa	aggctgatgt	2640
taaggtgtcg	gcagggctgc	atctcttttt	ggaggcccca	ggggagcatc	tgtttccagg	2700
gacatttagg	cttttgccag	aattgaggtc	cttgtgggtg	caggactgag	gtccctgttc	2760
tcttgctggc	tggctgccag	aggttgttct	cagcttccag	aggctatcca	cattccttgg	2820
cttgtggccc	cctcttcctc	catcttcaaa	gccataatag	cgggttgagt	ccttctcatg	2880
tttcaaatcc	ctctagtgc	ggcacctttg	gggggatcat	tatttgccta	gtatgcatag	2940
tatgaaatat	ttctgcagga	tggttaatttc	attctgtgtg	gaataaacga	acgtttataa	3000
atagtgtgct	ctttctggga	aggggggtgg	gtggagagaa	gttacttggg	gactacttgt	3060
gacctgcact	ttcagacttt	gccataaatt	tggcctcctg	gggaaggcca	caggctgctg	3120
caggcggggg	gccatcctca	atggcagaaa	gagctctggg	ggaccaggca	aaacctgctc	3180
tcaggctctt	ccctcagttc	ctttcctcct	tcctgaatgg	cagggtgcgt	tcctggagca	3240
gcagaacaaa	ctgctggaga	ccaagctgca	gttctaccag	aaccgcgagt	gctgcgagag	3300
caacctggag	cccctgttgc	agggctacat	ggcgactctg	cggcgggagg	ctgagtgcgt	3360
ggagggccag	agtggcaggg	tggccttaga	gctcaactgc	acgcaggagg	cgctggaggg	3420
ctacaagaag	aagtgtgcat	gacagggctg	gagtggttct	aggcagtgga	gtcagctcta	3480
gctgagatca	cacaactcct	ccagaagctg	agactgctga	aggccagggt	tgccctgaca	3540
agctatcaga	cacttctgct	ttaccgtctg	ctttatctcg	tgctcagctc	tagttcttac	3600
accctgtgtc	tgggggctgg	gaaaagattt	agagaagagt	tcctgtctg	ggagggatgg	3660
gacacacatt	cagggtacag	actgatgcag	agatgaagag	ataggaacaa	atgaacagg	3720
aggagcaagg	acagcagggc	tggagaggag	gagcccgagg	cagtcagagc	taggagcggg	3780
ggaaagggaa	aggccctgga	gaggtatctg	aaaatgaatt	ggctgaagcc	attccaagta	3840
tctgatgaac	ttggattctt	cctttattta	ttctgcagat	aaaccatcag	gttatcgttc	3900
tgacgggctc	cacaattcaa	ataccaatgt	aaatttgggt	tttcctgagt	tatttagctt	3960
gttcattacc	tagtctaaac	tcaccgggtc	actgtactta	ccttgtagat	cagacagagt	4020
gaagggtgat	tttgacctca	atcaatcctg	gtaattccaa	ccctgcttgg	gattcttggg	4080
agttcaggtt	ttaccatctg	gctggacca	gcagtgggtc	ctcatgtccc	ttggggtgaa	4140
gcaaatgtag	acacaatcct	cagtgtgcag	gcgtcaaggt	ctgtctccca	ctctgggggt	4200
gtgcgggctg	gtaattatag	agctgagtg	ttactgtagc	cccaaatgac	catggaattc	4260
aaaagttagt	aaaacaggcc	gggcgcagtg	gctcatgcct	gtaatcccag	cactctggga	4320
ggccgaggtg	ggtggatcac	ctgaggtcag	gagttcaagg	ccagcctggc	caacatgttg	4380
aaaccgcgtc	tctactaata	atacaaaaaa	aatttagctg	ggtgtggtgg	tgggcgcctg	4440
taatcccagc	tactcaggag	gctgaggcag	gagaatcgct	tgaaccgggg	aggtggaggt	4500
tgacgtgagc	cgagatcacg	ccactgcact	ccagcctggg	caacaagagc	gaaactccgt	4560
ttcaaaaaac	aaaataataa	taaagttagt	aaaaccatgc	tctgggctct	gggaactctg	4620
gtcttctttg	tgggggcagg	gctgctcctg	ggttacaaatc	tcacaggcag	gaggaagagg	4680
gctgggctgc	tggaggaggg	tgggggaatg	gcttgaagaa	gggggtgctt	ctaggaattc	4740
aagtcttggg	atattggggc	agggggaata	aaactctcatg	gggggtggctt	catagagctt	4800
tgtgttttgt	acagtgtaga	atttaaaggc	tctgtggaat	atctgtctgt	ttttaaatag	4860
ttccacaaat	atttattgag	tgactcactg	cacttcagggt	gatttagacc	aagacacaaa	4920
gagatttaaat	gtcttgcttc	aggttttgca	gcaacttcag	ttaagctggg	accagatacc	4980
agggacctgg	acttcaagtc	cagtgtcctt	ccaatgggtt	ctttgtggct	gggaaataga	5040
agtcacagaga	ggcaaaacct	cttctccaaa	ggcacagaga	aaggagaaaa	ccaggagagt	5100
tggcacacct	gggctctggc	ctggccagggt	cctcagtcct	aggggccttt	ccacctgggt	5160
tgtttctcct	caggtatgaa	gaagagctgg	ccctcagggc	cacagctgag	aatgagttca	5220
tgatgctgaa	gaaggtgagt	aactgttctc	acatggggaag	aattaaatcc	tggacaccgg	5280
acgctctgat	gctgtggggc	ctgtcaggtt	cccattagcc	caattgttgg	tggttaaggta	5340
ctggagcccc	tggcacaaga	aggtgggtta	gtttgggtgc	agaagccatc	atagagccca	5400
tgaggaatc	cagacagtg	cgatagagcc	ttcataaaaa	gaaaacctca	ccatgtcctt	5460
gcttgacttt	ttttaaaacta	ctggattggc	tgaatgttct	aattttaatt	ccgtcttggg	5520
tttttgcggg	cattgcctcc	ccctgtttatc	caagactagg	ggttgggtct	cattgtgtta	5580
atgatttcaa	agtgtagcca	tcattcagtg	caattgggtg	tgatggaaaa	gccctgggga	5640
ataaaactgt	gaatgggttc	ccttttgttt	catgttgctg	agtgaagtg	catgtgaatg	5700
ttctttaaca	agtaatgtgc	ttgcttgcca	gcctccttat	ttgtgagtat	cacagggtgg	5760
agtgaaggct	ggtgacagat	ctgccaatag	aggcttggcc	ttggtctcag	gcaggagagt	5820
cagctatttg	agtgtgtgtg	gtttcctggc	ctgggctctg	aggacaacct	acagagaggc	5880
tctgtgactg	tcgcatgctt	gtactctgtg	ggtcagttct	gctgggaggg	agcagcctga	5940
cgttctgggc	cgtggtatga	ggcttccttc	tttggaagg	tcctcggtc	tccacttcat	6000
ttccccaggt	ggtctcattt	atgcaatggg	aggttaacgtc	actggcagac	aacaaaggct	6060
ctgtcccttc	taggggggtc	ctgaagggtg	agatcagaag	tctaggttag	acttgtaagt	6120
gaagggtggc	tgggcagggt	gcagcagagg	gggccaaggg	gggccaaggg	gtggcctcag	6180
ggcccgctga	ggagagccga	ggctcagggg	cacagcgagg	gggaçaaagg	tcactccaca	6240

tcctcttg	tctatctcca	ccaggatgta	ggctacacct	atctgcacga	gacggacctg	6300
gaggccaacg	tgagccgctg	aaggaggagt	cagtcctcct	gcagtcctc	tacggggagg	6360
taaatctctc	cccattctctg	gaagagcaag	tgagagagga	gacaggggag	ggtttccttg	6420
gagtggtggc	tgctctgggt	cctgggttct	aggaaagctg	tacattcttg	actctcctag	6480
gcctggatat	ttttccttat	gtgaccagag	gggatttttc	tcttggtcgg	gtggaactgg	6540
gtgatgccct	tcctttaaga	tgatttgaaa	gaaagtgggt	aattcccatg	tcatgaagtg	6600
gagatctgac	aattaattta	ttaatttagg	tagtgtaaaa	acccaagcag	ataatccagg	6660
cctctccctc	tgcccaacaat	ctgggtgatt	agatttgatg	atagagctat	agctgatctg	6720
gattattcag	gccccaaagg	ggggtgagcc	ggggtgacgg	catacacata	aatccagctc	6780
tggtgatccc	tgtattagta	gaattccacg	ttactcattg	ctttgaggcc	acagtcccaa	6840
ttccagcctt	ttcctcttag	aactacagtt	tttaaatttt	cctgacttgc	tggtagtttt	6900
ctaatttcag	agttgggata	tttttttttt	tttttaattt	cctgagaaga	taggatcaga	6960
aggggatttg	gagttgaggg	cactggttgc	tgctctctac	aggaaatctg	cctccttcaa	7020
tcacaaatct	ctgacacctc	catgggtggg	aagatggaca	acagctggga	gctcaacatg	7080
gacttggttg	tggtcttagat	caaggctcag	tatgatgata	ttgccagctg	cagccgggtg	7140
gaggctgaga	cctgatacca	aaccaaggta	gtctggaggg	cagggcagcc	ccactgagac	7200
aggaggatag	ctgtgagcct	cgagtttccc	tgggaaacgc	actcctgcac	tctagagggg	7260
ctgccgctga	ggtcctgggt	agagcagggc	cagaaggcgg	gagagctgtg	gaacagtagg	7320
ctggctgatt	gggtcgggga	cagcagcctc	tagccattgt	ttctgcgtgt	ttgctctcaa	7380
cctgcagtgc	gaggagggtg	agcccaacag	ggtgagaacc	gggtgagaacc	tccgcagaa	7440
caaggatgag	ctcaacgagc	tgaactgcat	gatccagagg	ctgacggcag	aggtggagaa	7500
cgacaagcag	caggttgggg	ggcgccgaga	ccccgctcca	tacacctgcc	acttcttgct	7560
tggttctctg	ttccctccta	tcttcaggga	ctgctacat	ttggagaggc	gtgtatttga	7620
actgtgccag	agtacactac	tataatcagc	atgcaagggc	tcctgttcca	acaccacta	7680
ttatcaaac	tccaaattct	tgtggatctg	atagggttaa	actggcacct	aattgttatt	7740
ttaatcttca	tttctttggt	taagtagtga	tatcaaactc	ttcctcatal	acttactagt	7800
tatttgtatt	ccccttctaa	gacctgtcta	ctcatatctc	tgccattttt	tctattgtgg	7860
ttccttctct	ttttcttagt	gatttgcagt	attcctttgt	ccattctatc	tggtattgta	7920
gcctttgtca	gtacacatat	tgcaattaa	tttctctcag	tctatcactt	gtctgtttgt	7980
cctttattga	gccccaaatc	ttaagctgga	tgtgtcccaa	tccatcttaa	gttcttctct	8040
taatggttta	gacttagaag	gtattgaggt	aatagaggta	gcctcttaaa	tttctcccc	8100
cgtttagttt	atagttttac	ctcttgcat	taggtctgtg	atccatctga	actttatttt	8160
tttttttgt	atacacagtg	agtaggggtc	taaatataat	tttctacata	tcataagaaa	8220
atagattatg	taatccatcc	tttcgccagt	gatttgaat	actacctcca	gcacaacaca	8280
gtgctcccac	acatgcctgg	cttaactctc	gtcttctgcc	ttctgagttg	ctgttcttca	8340
tcactgcaca	ggatgtatca	ttagtaattt	gttggtggtta	agacctgagt	aatgaaatat	8400
gcgagtgggt	tactttttag	atgtgaaatt	agagaagatt	cgaagttgtc	ccgtgataac	8460
agtgtctttg	ttcatttgct	tctgatatgc	tttcttaagc	ggggtgaagg	gaggggctgt	8520
agttagtgtg	tcgggagttg	ttgcacatgg	gagcttcttt	cagcaagatg	atctcagcag	8580
gccaaagagt	gagaccctgc	acagtggcct	ttgaatacct	gagcttggtg	ctaattaaact	8640
gcatagctta	gggcaagtca	cagctttttg	gagtcctaat	ttcttctatt	gcataatggg	8700
aacaataatg	cctgtagtga	caagcttgca	gaataacttt	gaaggtcaaa	taagataaca	8760
tctatgaaag	taccttgtaa	acgaacaacg	gtatatacaa	gtataaggta	atatcactaa	8820
taatgatcat	tcctatttca	gtgctaacat	ttcttccctc	taatggctca	cctgccaaac	8880
tcaagtcatg	tttatgataa	agtgtacaaa	aatgaaggaa	aaaaatccaa	atggggccatg	8940
tcctgcctca	gttaattttc	catttatatg	tatttctttt	aaatagtatt	aagtttaaaa	9000
attaaccgtt	ttgaatggag	ataaaatagg	atgaccaagg	ccactggaga	cccaccagag	9060
tocccacaac	ctgcaccctt	tttaaactcc	ttccttctgt	tccatcccca	cagcgctgca	9120
agctggaggc	tgcggtggcc	cagtcctgagc	agcagggtga	ggcagccctc	agcaatgcc	9180
actgcaagct	ggctgagctg	gaggacgccc	tgcagaaggc	caagcaggac	atggcctgca	9240
tgctcaagca	gtaccaggag	gtgatgaact	ccaagctggg	cttgagcgtg	gagatcgcca	9300
cttatcgcaa	actgctggag	ggtgaggaga	tcgggtgagg	acaggggctc	caggggtccct	9360
tcaggttcct	actcagagct	ggactgaaat	attccaggca	gagaatgttc	aaactgggaa	9420
agactctaga	aatcatggac	tccaacctatg	tccccatttt	gcagataggg	aaactgacat	9480
cagagagggg	aaggggcttg	cccaagagca	cagccagttta	atggctcacc	taaaatgtac	9540
cagtcctctg	gctggccacc	aatgctcttc	tcctcctctg	acggcccttc	aggctggaat	9600
ctggatctca	ttccaaggcc	actactttac	cctcttgact	gaaaggatgt	ttctgcaatc	9660
agcttcagtg	ggttctttaa	gctggaatca	ttcagaaaat	tagttaaaag	ccatttgatt	9720
tggtgatgtg	aaagaatcct	atcaacctag	atagcctggg	gttcaggacc	aggggaataga	9780
aatgagcggc	acaagttctg	tccttgcaaa	ggaagacaag	acagacatac	atcagtcctc	9840
cagagcctgg	ggttagtggc	ccagggaagc	tgteacagaa	ggaggctgcc	ttctcaacag	9900
ctgaggagaa	gctatgctga	caatttgagc	caagaattga	gggcagggtga	agccagtggtg	9960
gggcagagtg	atgcgtatct	acacctggga	tggttgcatg	gtcctctgga	cttgggacgg	10020
ccacatcgtt	agagtttcta	gctgggtccc	ttcagggcgg	ggaggctaga	ctgggtagta	10080
gagtatacag	gtgaagagca	caggccatga	gcccatctg	ggttcaaatc	ccagctctgc	10140
cacttattag	catgtgacct	ctttgtacct	cagcatcttc	agctgtaaaa	cagagataat	10200

```

cacaaaatcc accttgtaag gctgttgca gattaagtga gttttaatgg aacatagtaa 10260
gccccagtag gaggaggtga ttgtcatgag atgatggcca ggctgggctg ccccatgaa 10320
gaggggaactc aaaggcctgg ttggctttgg aaaccttcca tgaagcgtca ctgatggcag 10380
cccgggccacg ctgctggact tgctccatgc ttggctcaag cacacacact tttctgccag 10440
cttccttggg gctttgggtg aagccactgg agttctgtct gcattcggat acttaagccc 10500
ccaacccact cactagcatt cagtgaagcag ctggcacttg cactgatttt cattatgata 10560
ctaataatta atggattaat aactcaatca gaattattag tacacatccc ctatccatgt 10620
gattttaaag tcaatttagc atattgtgct atgtgtactg tggccattga ccttttaaga 10680
gactgcctcc tcttggcatt taaaatattt aattttaatta cataagtaat gctcgtctgt 10740
gccaatacag aaaataagaa aacaaaagca ttcagagcca ctcaactcag agatagctgt 10800
cgccagcatt gtggtttgac aggcaccacc acgggactg tgggttcctt gaaagggcac 10860
agtcgtaagg ctgtggcaat gccagactga gtggcaggaa accgagccag atgtgtacat 10920
cctcactcaa aagatgagtg aagaagtgtt ttgagctggg cagaatgagg cagggtagag 10980
ctttcctggg gaaaaaggtt tgaagtggga agctacaaaa ggggagacag aacagaaagt 11040
gcagagaggt gtgagggagg agggagtgtt tataaaaaagc ccactgtagt ggtatatatg 11100
tctcatcata aataatatcc acatattttt tgagacagag tctcactctg ttgccaggc 11160
tgagtgcaatc ttggtcatt gcaaactcct cttcccgat tcgagtgtat 11220
ctcctgcctc agcctcccaa gtagctggga ctacaggtgc ctgccaccat gcctggctaa 11280
tttttgtatt tttagtataa aaagggtttc gccacgttgg ccagcctagt ctcgaaattcc 11340
taggctcaag tgatccacct ccctcagtct cccaaggtgc tgggattaca aaaatgaatt 11400
gtttataatg ttggtagcaa acatatttga tttccttact atgtgccagt ctccatttta 11460
ggcactttcc atgtagaact caatcgaact ttacaataat cctttcaggc aggtattatc 11520
accccatctc tatgctggag aaattgaggg acagaaaggt taagcgacct gcccaagatc 11580
accagctag taagccgcac agccagattt agtccaggc agcctggctt gaggtccag 11640
gctcttaacc acaccatact cttcagcctc cctctgcatt gaatgaaatc agatagatgt 11700
ctggggtagc atttaaaatc atgggtataaa aatgaatctg tttgagtaat aggcaagctt 11760
tttctgtctc agagacgtct agctaggtag cagcagcttc catcaccact ttggcttttg 11820
tggcatttcc agccaaggga ccaggaggat gcccccctca tctctacttc ccagttcacc 11880
aaatttccat ggctgaaagc caaacatggc ataaagtggc attttggatc ctgtaagcta 11940
acatactcct gtcccttttg gatccagca agcaggacca acactgatgc tgtctgcagc 12000
aggtgggtag cttccccctg cctcttaggg cccttcttct ccttcagcat ggaggagaat 12060
aggtttgggtg caaaagcaga ggaactcagc actaacgcta cactctctcc tctccctgca 12120
ggctgtgtga aggcgtgggc tcagtcaata ttgtaagtt ggggtgtgtg gggcatggct 12180
ttctggggtt tcagcaatct tagtattaga ttgcacttaa ctgatgacca agcctctgtc 12240
tatggagtgg tagacaaggg actcctgagc tgatgtctct gggatccaga caaactgatg 12300
acctcaaata tttgaccata catggatcca tctggaacac ccatgaagtc taagttaatg 12360
aatgggtgcaa attctgaacc cctatttggg tctgcaaaaa tagcttaagc ctttttagtta 12420
cacacagaat actactcaag tggtagcatg ttctagtaag aaaaaaagct aggtttatat 12480
tctgatcatg tgggtctctg caggcaactt gtaaatctct atctaataat ccaatgtaca 12540
cacagcccct gggccaggtg tctgattccc atccctccat tccctcacc tctctagcaa 12600
ccatatttct agatgactcc tctagtgtga tctatcagtt tttgctcaaa gattgtatga 12660
acatgtctca acatcagcct ggtccaagta gaggtttggg tgcaatttgc taaccacact 12720
cctgaaggaag cagatggcag tgggttcagg tttgcctgta gtttaaaaag actcatgttg 12780
ctggctccctc agagaaggaa gataattaat cattggttct aaaggattct gggtcataac 12840
atgtctgaga tggaagagaa ttctgacctg tgtctctgtc cacatgtgtg agccattccc 12900
aggggtggtg ggtctgcggg gacctggact ccactgcctc ctgtggctca ggggggtgtg 12960
ccatcagcag tgggtgcactg tgttgcctct ctggcagggg ggcctgctcc agtgcccaat 13020
ctgtgcggtt tgcatagagg ggggtggact ctggacggac ctggtctgat gggggcagtg 13080
tgggttgggg agtggaatc ttttctcttg catgaccaaa tgtcagttta gtaatttccc 13140
cttacagaga acccagaact aactctcctg tttccttctt attggagtta acaatttact 13200
ttctctgtgt aaaccctggg tttgacatta ttttcaactc cattgcttct ccccttccct 13260
gtgggttcagg aatgaaatag aaaggctttt ttttgaatct atttctcggt cattgtcttc 13320
cccaattaac ttcaggccag cagatgttaa attaagtctt gactgtgtgc cagatcctct 13380
tggaacggag ccagctagag ggtgtggagt atgtgggaac atctctgcgc tttgcctctg 13440
gatgacaggg gctccagatg ctgc 13464
<210> 371

```

<211> 2508

<212> DNA

<213> Homo sapiens

<400> 371
 agctctcccc accaataaaaa ggaccagggg ggatcagaga gagcagaagg atcctgagcc 60
 tcgcactctg ccgcccgcac caccttccgc tgccctctcag actctgctca gcctcacacg 120
 atgtcgtgcc gctcctacag gatcagctca ggatgcgggg tcaccaggaa cttcagctcc 180
 tgctcagctg tggcccccaa aactggcaac cgctgctgca tcagcgccgc cccctaccga 240
 ggggtgtcct gctaccgagg gctgacgggc ttccggcagcc gcagcctctg caacctgggc 300
 tcttcgcggc cccggatagc tgtaggtggc ttccgagccg gctcctgcgg acgcagcttc 360
 ggctaccgct ccggggggcgt gtgcggaccc agccccccat gcatacctac cgtgtcggtc 420
 aacgagagcc tcttcacgcc cctcaacctg gagatcgacc ccaacgcaca gtgcgtgaag 480
 caggaggaga aggagcagat caagtccctc aacagcaggt tcgcggcctt catcgacaag 540
 gtgcgcttcc tggagcagca gaacaagctg ctggagacca agtggcagtt ctaccagaac 600
 cagcgtctgt gcgagagcaa cctggagcca ctgttcagtg gctacatcga gactctgcgg 660
 cgggaggccg agtgcgtgga ggccgacagc gggaggctgg cctcagagct caacctatgt 720
 caggaggtgc tggagggcta caagaagaag tatgaagagg aggtggccct gagagccaca 780
 gcagagaatg agtttgcgt tctaaagaag gacgtggact gtgcctacct gcggaaatca 840
 gacctggagg ccaatgtgga ggccctgggt gaggagtcta gcttctctag gcgcctctat 900
 gaagaggaga tccgcgttct ccaagcccac atctcagaca cctcggctcat agtcaagatg 960
 gacaacagcc gagacctgaa catggactgc atcatcgctg agatcaaggc tcagtatgac 1020
 gatgttgcca gccgcagccg ggccgaggct gactcctggt accgtagcaa gtgtgaggag 1080
 atgaaggcca cggtgatcag gcatggggag accctgcgcc gcaccaagga ggagatcaac 1140
 gagctgaacc gcatgatcca gaggtgacg gccgagattg agaatgccaa gtgccagcgt 1200
 gccaaagctg aggtctgtgt ggctgaggca gagcagcagg gtgaggcggc cctcagcgat 1260
 gcccgctgca agctggctga gctggagggc gccctgcaga aggccaaagca ggacatggcc 1320
 tgctgtctca aggagtacca ggaggtgatg aactccaagc tgggcctgga catcgagatc 1380
 gccacctaca ggccctgtgt ggagggcgag gaacacaggc tgtgtgaagg tgtgggctct 1440
 gtgaatgtct gtgtcagcag ctcccggtgt ggagtctcct gtgggggcct ctctacagc 1500
 accaccccag ggccgcagat cacttctggc cctcagcca taggcggcag catcacggtg 1560
 gtggccccctg actcctgtgc cccctgccag cctcgttctt ccagcttcag ctgcgggagt 1620
 agccggtcgg tccgctttgc ctagttaggt catggagcca gggcttctct ccaagcacct 1680
 gccctcctgc atcactgcac tgaatggcat gtgaatggaa aatgtgtgct tgcttcaga 1740
 atcttctgga tgttctctaca gagggaaaga cctacagagg gaaagaccct cgggccgctc 1800
 ccctgcgcct tttcatgcta gggagatgca tcctagtgtt cctcctggca gctgttttca 1860
 gaggcattcc cagcccttca cttaactcct acttagctcc aaaatacctg tatccaattt 1920
 gtattattcc cccagctctc agggacaaga ccagtcctcc agcgtggtgg tcagcacgga 1980
 agctccacct tctgggtgga ggccgcatcc taacctcca gccaggccac ccacaacctg 2040
 agaatcaggg agaaagtccc tccccagcag cccctctctc ctggctggga agaattggtc 2100
 ccagcaagc acttgccgtt tcaattccgt tcatgttttg cttctctctc agactgcctt 2160
 cctgcttctg ggctaacctg ttccagccag gctcctcatg tgacctcgca gttgagaagc 2220
 ccattatcgt ggggcatcct tttgcttaca gcccctgggt agggcacttt ggacaggtct 2280
 tgattattcc tgaacctttg tacatttcaa agaagactcc atggctgctc cagatgcccc 2340
 cttgctgggt gcaggtgggg actgtccaat gcagagctgg cgggacagag agttaagcca 2400
 cttcctgggt ctcttctta tgactgtcta tgggtgcatt gccttctggg ttgtctcgat 2460
 ctgtgtttca ataatgccg ctgcaatgca aaaaaaaaa aaaaaaaa 2508

<210> 372

<211> 2404

<212> DNA

<213> Homo sapiens

<400> 372
 gctcaccat tctacacttg ctcttttctt cccaaccagg aagccatcat gtcttgccgc 60
 tctaccgag tcagctctgg tcaccgggtg ggcaacttca gctcttgctc agcaatgaca 120
 ccacagaacc tgaatcgctt ccggggccaa tctgtctcct gttggagtgg gcctggattc 180
 cggggccttg gcagcttttg tagtcggagt gtcatacctt ttggatcgta ctcaccccg 240
 atagcagctg taggctctcg gccatccac tgtggagtcc gctttggtgc tggctgtggg 300
 atgggttttg gtgatggag aggtgttggt ctggggccta gggctgacag ctgtgttggt 360
 ctgggctttg gagctggcag tggcattggc tatggctttg gtggccctgg ctttggttac 420
 agagtgtgag gggttggagt ccagcagcc ccatctatca cagctgtgac tgtgaacaag 480
 agcctactga ccccccctca cctggagatt gaccccaatg ccagagggt gaagaaggat 540
 gagaaggagc aaatcaagac cctcaacaac aagtttgcct ccttcattga caaggttcgg 600
 ttcttagagc agcagaataa gctcctagag accaagtggg gcttctcca agagcagaaa 660
 tgtatcagga gcaatctgga gccactcttc gagagctaca tcaccaacct gcggaggcag 720

ttggaggtgc	tggtcagtga	tcaggcccgg	ctccaggctg	agaggaacca	cctgcaggat	780
gtcctagagg	gcttcaagaa	gaagtatgaa	gaggaagtgg	tatgtcgggc	caatgctgag	840
aatgagtttg	tggtctctgaa	gaaggatgtg	gatgcagctt	tcatgaacaa	gtctgatctc	900
gaggccaacg	tggtatccct	aactcaggaa	attgactttc	taaaaacgct	ttacatggag	960
gaaatccagt	tgctgcagtc	gcacatctca	gagacgtcgg	tcattgtgaa	gatggacaac	1020
agccgtgacc	tgaaccttga	tgggatcatt	gctgaggtca	aggcccagta	tgaggaggtg	1080
gccaggcgca	gccgggctga	tgctgaggcc	tggtaccaga	ccaagtatga	agagatgcag	1140
gtgacagctg	gccaacactg	tgacaacctg	cgcaacatac	ggaacgagat	caacgaactg	1200
acccgcctga	tccagaggct	taaggcagag	attgagcacg	ccaaggctca	gcgtgccaa	1260
ttggaggctg	cagtggccga	ggccgagcag	cagggcgagg	cgacctcag	tgatgccaaa	1320
tgcaagctgg	cagatctgga	gtgtgccctg	cagcaggcca	agcaggacat	ggcgcggcag	1380
ctgtgcgagt	accaggagct	gatgaatgcc	aagctggggc	tggaatcga	gatcgccacc	1440
tacaggcgcc	tgctggaggg	cgaggagagc	cggtctctgt	aagggtgttg	accagtaaac	1500
atatccgtca	gcagctccc	gggcccctg	gtgtgcgggc	ctgagccttt	ggttgcgggc	1560
tccaccctct	cccgccggcg	ggtcaccttc	tcaggtagca	gcagcgtctg	tgccaccagt	1620
ggggtcctgg	cttctctgtg	ccccagcctg	ggtggagccc	gggtcgcccc	ggccactggg	1680
gacctgtctg	gcactggcac	aaggagtggc	tccatgtctc	tcagcgaggc	ctgtgtcccc	1740
agcgtccccc	gccccctgcc	caccagggg	ggcttcagca	gctgcagcgg	cgcccgccagc	1800
tccagcgtcc	gcttttgtgt	caccaccacc	tccgtccgga	ccaagtactg	agagcccagc	1860
cccagacagc	tgctgccag	agaagaacca	gtccacggc	tcctgcttct	gccccagggg	1920
ttcgtgggct	ctgggcttga	cggtctccag	ctcccccttc	tgccaggaag	ccacccttta	1980
gcactccccc	gattattctg	cctggcccca	tgctcctctg	gaggattttt	ctgccatgta	2040
gatgtcccat	tagcagttcc	agctaagctg	gcttctccct	gcctcccaat	ttctgtcctt	2100
tggtactctc	ctctccctaa	accccgagat	ggcttttctc	ccagtggctt	ctctccggct	2160
gtttctcttc	ctgggttggt	ggtgtaactc	cagcatgcaa	gtccacgagg	tggggtgcag	2220
gcggacaggg	gggctttgca	atgatcccc	tactcctgcc	cctgctcgtg	gtgtgaggcc	2280
cagccctgtc	cactgcaggg	ttgtgtctgc	aagctccaag	gaggccctgg	ggttggggtg	2340
ggtgggctgc	ctgtgtgcac	tactctttgt	gttcctgggt	tttcaataaa	cttgccaagc	2400
tcac						2404

<210> 373

<211> 2681

<212> DNA

<213> Homo sapiens

<400> 373

acatctcagt	cctccatccc	cctaccagat	aaaagggggg	aagctgagcc	tgacttgatc	60
atcctgcccc	ggttctttcc	tccagggccg	catttctctg	cctctctctc	ctgccatgtc	120
gtaccactct	ttccagccag	gtccaggtg	tggcagtcag	agtttcagct	catactcgcc	180
tgtctagccc	cggtatggtc	cccactatgc	agtgcagca	gggcatgcc	ggccgggggg	240
tggtaggggc	ctccgagctc	tggtgctgct	tggtcagcgg	agcctgtgca	acgtgggctt	300
tggtgagggc	cggttagcct	ccaggtgtgg	aggtaccctg	cctggcttcg	ggtaccgact	360
gggagccacc	tgtgggcctt	ctgcctgcat	caccctgtc	accatcaatg	agagcctgct	420
ggtcccactg	gcactggaga	tagaccggac	tggtgcagag	gtaaagaggg	atgagaagga	480
gcagatcaag	tgctcaaca	accgtttcgc	atctttcatc	aacaaggtcc	gtttcctgga	540
gcagaagaac	aagctgctgg	agaccaagtg	gaacttcatg	cagcagcaga	ggtgctgcca	600
gaccaacatc	gagcccatct	tcgagggcta	tatcagcgcc	cttcggcgcc	agctggactg	660
tgtgtccggg	gaccgcgtga	ggctagagtc	agagctctgc	agcctccagg	ctgcactgga	720
gggtacaaag	aaaaaatacg	aagaggagct	ctccctgcgt	ccctgtgttg	agaatgagtt	780
tgttgccctg	aagaaggacg	tggaacacag	cttctctgat	aaggctgacc	tggaaccaa	840
cgagaggcca	ctcgtgcagg	agatcgactt	cctgaaaagc	ctgtatgagg	aggagatctg	900
cctgctccag	tctcagatct	ctgagacctc	ggctatttgt	aagatggaca	acagccggga	960
gctggacgtg	gacggcatca	tcgctgagat	caaggcgag	tatgacgaca	tcgccagccg	1020
cagcaaagcc	gaagcagagg	cctggtacca	gtgcgggtat	gaggagctga	gagtcacagc	1080
tggaagacc	tgtgacaacc	tccgcaaccg	taagaacgag	atcctggaaa	tgaataaact	1140
gtccagcgg	ctgcagcaag	aaaccgagaa	tgtcaaagcc	cagcgtgca	aacttgaggg	1200
tgccatagct	gaggcagagc	agcagggcga	ggcggctctc	aatgatgcca	agtgaagct	1260
ggcagggctg	gaggaggctc	tgcaagaagg	caagcaggac	atggcctgcc	tgctcaaggga	1320
atatcaggag	gtgatgaact	ccaagctggg	cctggacatc	gagatcgcca	cctacaggcg	1380
ctcgtggag	ggtgaagagc	acaggctgtg	cgaaggcatc	gggcccgtga	atatctcagt	1440
gagcagctcc	aaaggcgcct	tctgtacga	gccatgtggg	gtcagcacgc	ctgtcctcag	1500
cactggcgct	ctcaggagca	atgggggctg	cagcatcgtg	ggcactggtg	aactctatgt	1560

```

cccctgcgag cccagggggc tactgagctg tgggagcggg cggaaatcca gcatgacgct 1620
aggagctggg ggcagctccc ccagccacaa gcattagcat gatccgagac atccaggaga 1680
cagagccccct gcccctatggc cctggatgtc acactcccac cagggtgtaa gacaaggatg 1740
ttccaaaacc ccacctccct ttattgactc cacattcccc tccagtgttc cctccttgag 1800
agctgagctg cccctaggac ccctcctttg cctcatgagt caccttccac tcacctgtgt 1860
gcagaccctc agctaggccc agatggtggg gacagacggc agagaaagag catgcattgc 1920
tcttaaccgc agaattggcaa taacccccaa aagggtcaaat gggcacacca cagttctgct 1980
ctgtggatca tcccattggaa gtttcctcac aaagtcagct cctctccccc cacaggctca 2040
cactgcccctt actttaggct ctcatgcccc taagaaaagt gaatttcctt taacaccgcc 2100
tgaaacatgc acactgcaaa tatcaaaagg agacaccccc aaatcccact ctaaattcca 2160
aagccaagtg ccacgatttc aggatcagtc aggacctgcc aatgtcctct cagcacagag 2220
aatcaagagg tggccttttg gcagtagatt tactttctca ggtatgttga acccaactg 2280
tgagaataaa tctttctcct gagctcacat tggcaggtga tgtcaggcca atgcctagaa 2340
caaaagggcaa agggatatgg aatgtttact ggacagttgg aaaacaaaaa acagatacca 2400
ttttctcaat ggaatcagtt cccctccac ccattccctt ctgtacatag ccgccccttc 2460
ctgttcccca accctttagc tccttttgct ttgagtctga tatgacagt atgtggggct 2520
gcccagctg acttgagggc cctggctcag gagctcatag atggaggagg tgtgggctga 2580
ctacctccca gaagccctc atgccaagcc tgtccactg gggctccagg gcctctgccc 2640
tgaacatctg ggcttctgtt caaaataaac ctactctgtt c 2681
<210> 374

```

<211> 11529

<212> DNA

<213> Homo sapiens

```

<400> 374
cagagtatat ggacaactga gtccagattc taggtctaga gagatcatgt cagaaagaaa 60
atggacatat taaactttct gccaaggacc tctgccccat ttaatggaat tcaaaaacttc 120
accagtaaat atgatgggtg cgtgttcttt tcttgaatta tcacacatgc acctgggttg 180
tgccagcccc tctgactctt cctgtctctc ccctctccaa acaaaacccat ctgtccccc 240
accccatatgc accaacatct gcttggtctc ctatgttcca ggttccttcc aggtcgagga 300
agaggaggaa gagcctgcca cctggactct gagatccagg ttgtgcagag cctccctgca 360
ctggttaggga tcccatatcc cagagccctc tgggagggtc ctgcatggaa gctctctcag 420
tctcttacct ctgactgggg cagggtgtgtt ttctggaaca ggagaacaaa gtcttgga 480
ctaaatggag ctctctgcaa ggccaaaaaa ccaccagggc caattttgag cccatgtttg 540
atgtccacat cgacaacatg aagcagcagc tggactgcct ggggtggagg tatgtgaagt 600
tggatgtgga gttaaagaac atccaggacg tggtagggga cttcaagaac aagttagcag 660
acgctcagcc agtgccctgg ccagggtcct gccctggggc tccagggggag gtcagagggg 720
gcaggagaaa cagcctctgc tctccagaaa tgtccagtct agtggggaaa cgggaacacac 780
ttagggcaca gaggtggaat cagaagtaaa cataaaagtg tcaagagAAC tgggaccac 840
cctgtggtca agaattgctg ggctttagtg aagggtggg attgtagatg atgataccta 900
acataggtac aaaaagcatg atacacacag cattcttcaa actctgcaga taaggaaagt 960
aaggctctga gatagcatac caaagatgac acaaagtggc aactcaggag ttaagaatga 1020
atcccataga atctcactc cacatgaatg caactaaatc tcaactgctaa tttgcacagt 1080
gttcacatat tcaacttaat ccaggcaaag aggtctggaga acaaaaaaga aaggacacat 1140
ttgtgcctt ctcccaggac cacacacaca cacacacaca cacacacaca cacacacaca 1200
ccactaaaca taatgagatg ctcaaagtct catgcctgta gatacaaat tcttgatttt 1260
attgttttta cttattttta tttcttattt ttctggttct aattattttt aattctcttg 1320
gtctaaccba aattagtaac tggatcatga gttttggtta aactgtttg tatactctag 1380
cacaagttca ggttttagag ttgtgctgtc caacatagta gccaggagcc agtgggccaca 1440
gatgactatt taagtttaaa ttaattaaaa ttaaataaaa tttaaaattc agttcctcag 1500
tcacacttgc cacatttcag gtgttcaatg gccacacatg gctaattgat cctgtaatga 1560
acacagatac agagcaattc tgttatcgtg gaaagttctc ctggatagca ctatagactt 1620
cagagttagt ggatttagga tcttggtctc accacttaat ggctgaatga ccttaagaaa 1680
actatttaag ctctcaaagc ccagggttct ttatctgtta aaagagacat caatagtgcc 1740
cacctcacia gagcattgag attattaaat caaaacttgc atgtaagggt cttggtaggg 1800
ttcacagtgc ctggcacata gtaagttgtt aataagtggt agctatgttt attgtattta 1860
tgattaggta cgtgtagtga tacagacgca gacaagagaa gcaagtgcag atgggtaatt 1920
tataacatgt atgcaagcgt ggactaacag tgtttcaata caagaagact tcctgggaga 1980
gaaggctaaa gcttagcatt gaaaaggaag aaggcacagg ggaggatat ggtagggcac 2040
ctgttgaaga gtgtgttcct agtcaatgac caggcagtg tctgtggca tcaaagtggc 2100
ctgtgcaggg ccaggcgtat cttgcccttc agcagaggga ctgtgagctg ggccacatgg 2160

```


aagacgagga	cagttgtatg	gagttaggtg	aagaagagac	attcagagtt	cattaaaagg	2220
caactcaaag	aaacgatgag	gaaaaccaaa	ttgctcttcc	cagagaaacac	tgagagaaaag	2280
cacaatactg	aaatttcaat	ggcaagcaag	agattttctc	agatcctata	gagcagcaga	2340
ggaaatataa	aagccaggaa	gacctgtctt	catgtaagtc	atgtgtgatg	ggactctgtg	2400
gtttttaaag	aatgacaact	ttccattaca	tagtagagaa	agatcctctg	agaggtcata	2460
tggtctgatg	gcagagcagc	tgagatcaaa	accacagctg	tctagcacca	cgaggggtggg	2520
gtgtgctgat	gcaccaagt	aggttgggtg	gagaatgggt	cacctggaac	agaagcaaaa	2580
cttccttccc	agagatcagt	gagcaggagg	cacctccaca	tgccccctggg	ggacagacag	2640
gggtggggtg	ctgcctacag	gtaaattgaa	gaatgagaaa	ccttttggggg	agaggggttcc	2700
tatggtcctg	aagtctctgc	tccttaggcc	acagttcagt	gtgcctgaac	agagtggagg	2760
aaatgcgagt	gttgtacagt	gaggggtctg	cggcctctga	cctttctccc	tgttcctctc	2820
ctccctgccc	tggttggggg	caagaccata	aaaaaaaaaa	aaaaaaaaaa	agggaaatgt	2880
atatgccctt	ttatgggacc	caaatactcc	aaggagctga	gctgtgagaa	aagaaacctc	2940
aagtagactg	agaggggatc	tgttttgttg	cctttgggtt	gggttgtgtt	tggtggttta	3000
tttgatttgg	gatttggggc	catgtgtgtc	ataggagagc	caggctacag	tggagcattt	3060
gctaaggctg	ctctgcagac	ccaccattgc	ctgtccacct	ccaccctact	gctctgacct	3120
cactaccagc	gccaatcca	accccaaacc	acttcttgat	ccttcccaga	ggtatgaaga	3180
agaactcaac	aggtgcaact	aggcagagaa	tgagtttgtg	gtgctcaaga	tgagtggaca	3240
gagttcctcc	tgcccagctc	ccagtggcct	catacaaggc	cttatttaat	ttgcacagca	3300
agcctagaag	taggtcttac	tttaacagtg	gataaaactg	aattcagaga	ggtaaagaca	3360
cttgcccagg	gctacctagg	taatcaggag	tgagtcagga	cccaggactc	caaagtctga	3420
gctgcaaatc	ccaacaccag	ccccgcctg	gtggagtcca	gtgtggagac	aggggaagca	3480
aaacgggcct	tgctctgggc	tggttctcta	ggcaccctg	caggctcagg	aggacagggc	3540
agcccagaag	cagctccacg	gagtcctggg	ccttctgct	tggtggccag	ggccagaaca	3600
gggttgtcct	cacaatgtga	ggtgatgcag	gagacccttc	aatgtggcac	cagagctgat	3660
gggcagggtg	gcacccctga	aggccctggt	cttcacagag	tttggaagtt	ctactccctc	3720
cctcctctcc	aagttctaag	ttctactcca	tgccctggag	tagacagatg	ctctgtcctt	3780
gggagctgaa	gctctcccac	ctaattcaca	gacagagggg	gctggttatc	cctggaaggg	3840
taaggcccag	agtgatagca	tggtctgtgg	gacatggatg	ctgtctacat	gaacaaagt	3900
gggttggagg	ccaaagtggg	tgccctgatg	gaggagacca	acttccctgag	cactttctat	3960
aaggcgggtg	gagtgcccg	tgccccctcc	aacagggggg	ctgggggctg	ggtcttagag	4020
cctcagctgg	gcacagagcc	tgtgggctcc	ttccctggtc	ttctctctgc	tccttatccc	4080
acctgcgtat	tgaggggcag	atgccacttc	ccctaccaca	ggagaaaaatg	aggttccata	4140
gagcggctgg	caggtcagga	gagatgaaaa	attcagcctt	aaccatctgg	atcataagctg	4200
ttctgtttgg	caggcagaaa	aatggaccac	ctgtcattaa	aatatggatt	tcctagaaac	4260
tttctgagca	acttggtcca	tcctgccctg	ccaaaattta	cctgctgctc	ttcctagagc	4320
aactgcaggg	tgatgcaatt	acacaaatca	agtggcaatt	agtgagccct	caggtgcttc	4380
tgaggagcaa	cagcacaatt	gcctggttct	ccgttttgtg	cctccacaga	gctgcaggca	4440
cagtgtcag	caaatacaac	ggggcctgta	agttcttgaa	gcttacagta	tagtgaggga	4500
gaaaggcaca	acagagataa	tcaaatcact	gtactatttc	aggccctaca	gaggcaatga	4560
agagaaatga	cagtagaaag	caatcatagg	cagtgggtgg	gtgacactgg	acaagaaact	4620
tgaagggaat	gagcatgtca	gccaggaagg	catgggtggg	gggggcagtg	ctccagcaag	4680
aagggaatggg	aagtataaat	gcccccggt	gtgatccagg	aatgccagga	ggaggacagt	4740
atggctgggg	cagaggggag	agtgggtgaag	ataggccag	cagtgtcaag	gtgggggtga	4800
gggtgagtg	agtgcctcca	ggtaggcctg	gtgaaggacag	gtgatatgcc	cataggggtca	4860
cacacacgtg	atgccaaca	gaagctggtc	acattgttcc	aggacctggg	gcttcagctc	4920
tgattgtttg	ggtgggtccc	aattccacct	tacaaccac	agggggataa	ccagccccct	4980
ctctacttgt	tctcttcaat	gctgacaaca	gggtgatatt	gcctccgaat	tctgaactag	5040
cccacagcca	gcaagcctgt	gggacaagac	ctttgaacta	gatctgctgc	caggaaaaaac	5100
tatttgggaa	aaacaagccg	cagcacataa	agaaaataat	aatttgttga	aacgggaaat	5160
gtatgaatca	gtcatcaata	aagagagaaa	aggaatat	ttacttagac	ttctgctttg	5220
gcctactgat	tctcaaattt	taaagagcat	cagaatcttc	tagaagtgtt	gctaaacacc	5280
aattctgatt	tagtaagtct	gggctggg	cacagtgttg	catttcaatc	aagtttccag	5340
ctgatgtgat	gctgatgctg	gtttgaggtc	acattttgag	aaccactgag	ttagatgatc	5400
ctgaaaatgg	accattaaca	aattaatgtt	gggttccactg	tttccagacc	atcttatctg	5460
gatgtcattt	aatctccaca	aattcatttg	aggccagtat	tatgatcagc	cttgctgaga	5520
tctgggatgc	tattttaaag	tgattggcag	atacaagact	caaatttgtc	agttgggtgc	5580
cctttctgct	atttccagct	gatttccatt	ccccatccta	ccccgagga	gcagggagga	5640
gccaaattgg	gaaacgcaac	tggaagtag	ccaagtttcc	tggtctcttc	tgactcagtt	5700
ttctttcaca	agatattttc	cttatttgg	gtgaaggct	gtattttctc	agaacatgag	5760
acatctgtga	tactgacagg	tcacaacatg	gtgtgctcct	gtgacaacag	agtggtctct	5820
ggagaatgct	ggctggagtt	acatgtgctg	ctgctccctc	cacgcagatg	agctgatgac	5880
aaagaacagc	tataaactca	atgacctccc	taatgttctt	cccagccctt	tcagcctaca	5940
caggccactc	catccctacc	gtgcaagacc	ctcaatgcca	gggtctgttc	cagggggcag	6000
atcacagcct	cccaaaacat	gccccacac	acacatgcat	acacatgctc	acacatgcac	6060
atgcatgca	acacatacat	gcactcgcat	gcacatacga	acgcacatgc	acacttgcac	6120

acacacacac	ggacacacat	gcacatgcac	actctgcctc	agctctctca	tttggaccca	6180
accacaaaag	ctggctcagc	ttcaggccca	gatctctgaa	acctccatgg	tccttctgtt	6240
gatggaaaac	aactgcaaac	tggacctgga	tagcatcatc	attgaagtca	aggcccagca	6300
tgaagacatc	gccaacaaca	gcagggtgga	ggctgagttc	tggtagtaaa	ccaaagttag	6360
acatcaaggt	caagttcatt	aaacaagcac	aaaaaaccca	gatttcaaa	gcaaacaaga	6420
taaaagccat	gtcctctcag	atgtcccagt	ctgatagggt	caagggatct	gagttcagct	6480
tggggctcac	cctatgttac	ctgggggaag	catgtcagga	cctgggggaa	agccagataa	6540
aggcaggagg	tggtcagtc	ctctgccaag	aggaagatgg	acacacctcc	aatgccctgt	6600
atcagagaga	aaagggacag	ctggacagtt	ccagccatca	gtgccaacag	gaggaacaga	6660
gagggagggt	ggggacaaga	ggaaagttaa	accccttggt	gaggaggctg	gaggatccag	6720
agaagaaagg	cggaaactgg	tggggcccag	gggctggagg	gcaaagtctt	aatctaagtc	6780
acagactggg	attttccaga	tgagagcaaa	cattctgccc	tgggagtcgt	tgggatgata	6840
atttgcaatg	ccgaggaaaa	cacgaacaaa	ggaaaagtga	ttggcaccta	cctgatgctg	6900
aatttgggag	ggtgagatgc	atggtgtcga	gggaaaggga	agaaagacca	ggatataggaa	6960
gaagggaaag	agcacagcca	cagctgtcca	gctgtagggt	gaagccagtg	ggcatagaaa	7020
gtgagggaca	gagtcagag	aaaatgcaga	tgaatttgat	tgggccagag	gcgggccagc	7080
agggaggctc	tcagacgcac	atgaaagcct	atggggctgt	gggaaaccac	agccttctct	7140
tccttgccct	ggctgtccct	gccactgca	cgcaccccc	atccgaggtc	tgcttctcct	7200
cctcctagt	acaaggagct	acagcactct	gctagcctgc	acgggatgac	ctccacacca	7260
ccaagatgga	gatctctgag	ataaactggt	aatgcagagg	ctgcactctg	agattgataa	7320
cttgtagaag	caggtagggc	tgagctccca	ggtgtccttc	catccatgct	cctgcctcca	7380
ggtggacttg	tgcttgggct	tcactcagcc	cctacagaga	gaagcctccc	agatgagtgg	7440
ccttccagga	atataaatat	gcattcacct	agtgcaatgg	ttaatatgtt	caacttgatt	7500
ggattgaaga	atgcgagaaa	ggcactttct	tctggaagag	taaatggcaa	aactttggct	7560
tgctttactt	actcgcaatc	cagaaaagtt	cagcattgaa	aaggacctca	gagggctggg	7620
tgtggtgact	cacgcctgta	atcccagcac	tttgggaggg	tgaagagggc	ggatcacctg	7680
aggtcaggag	ttcgagacca	gcctgacgaa	catggtgaaa	tcctgtctcc	actaaaaata	7740
caaaaattag	ccaggcatgg	tgggtgcgcg	ctataatccc	agctactcag	gaggctgagg	7800
caggggaatc	gcttgaacct	gggagatgga	ggtgtcagtg	agcagaaatc	gtgccagtgc	7860
actccaacct	gggcgacaga	gtgaaactcc	atctcaaaaa	aaaaaaaaaa	agaaagaaag	7920
aaaaggacct	cagaacatca	ttttctccat	tctggctaag	tctcaacta	cccaaggtgg	7980
acagaaatca	atcttagttt	taaagatgat	gcagctccaa	cctcctttgc	attaaatcca	8040
cttcagggaa	ttctttcata	ttttcaactt	aaagttcata	gaggatctta	ctgcacctc	8100
catgaacaat	gtcacacaca	ttctcatcgc	caactggcag	tgtgccatgc	cccagccac	8160
catcgctgc	tgatgccaa	cagcatggga	agctggcact	aagaacaagc	tgggtggagct	8220
ggagatagcc	ctgcagaagg	ccaagcagga	catggcgag	cagctgtgca	ggtaccagga	8280
gccaatgtat	gtcaagctag	ccccggacat	tgagatcgcc	acctacagga	agctgctgga	8340
gggcttgaag	agcagggtgg	ccacccctcc	cctcccacta	ccacccaaac	agatgcacca	8400
gaccacgaca	gcaatgccac	agaggcccca	tgagcgccac	agtgtcagcc	ctccagatga	8460
agctcccagg	tcagaaacag	ggttaaaatg	caattgctcc	cttaaaggcg	tcctgcagtt	8520
gcagcccctc	ccacagctgt	tggacccagg	gcagggtgga	gggtcaaagg	ggtcaaggaa	8580
gggacgctaa	gcaagaccct	ttcttcccaa	gtcctgtgag	aaatgcaatc	atgcttggga	8640
caaggctcag	gggctctgga	attgccttgc	aagctgacgg	tctcgacta	cctctctacc	8700
acagctgcct	cttctcattt	ctctctgtat	tgtgactcgt	ttctctctcc	tggattttcc	8760
tcacagatgc	acttgagctt	cccaaggcta	gcaagctgag	gggagagctt	gccaagcaca	8820
gtgcctgata	catgtaagca	ctctgtgctg	ataactttaa	atacaaagaa	cccaggggcc	8880
cttaacctct	cagcaaacaa	aatgactcct	tctctcccta	gcggctcacag	actcactgaa	8940
ggtgtcagag	ccgtcagtac	ctgtgagtca	atgtcttgga	atggtagaaa	agtggggggc	9000
acaattggaag	ctgggagcat	cactcttgag	ggctgggtgg	gtcaaagatg	agcaggcagg	9060
ggcagggatg	tcacaaagac	cctcttgagg	gctctatggg	gactcttctt	gtgccttctt	9120
tccccatgag	gtcaagagaa	ctcaaaaggg	gcacattcca	tgtcactaag	gagctcaaca	9180
actttctcct	cactctggct	taatctccac	aaaaactgtg	gcgattaatc	tgcagggtgac	9240
ccctcacccc	cagggtgggt	cccagaagat	cccagtgaca	ggacaagact	attcaaacaa	9300
tcgtgggtcc	ccagtctgaa	tgcctgattt	ctcagctagt	gctgtcagga	actcaaaacta	9360
acacaaataa	gaggctatta	aacagattaa	atgtaaaggc	ctatatattag	aattgaagca	9420
tatgaattca	acaaatagaa	cagtgactga	tctggcggtg	cctcaactca	caggaggggag	9480
agcagcagtg	acctcacaga	gtgaccaccc	agggctctgg	ggctgtgtgt	aaaagctcag	9540
catcataggg	ggcattaatg	ggagcattga	gtcctgggtc	tgggagtaga	atccccttga	9600
gacctatgtg	ggtcagatca	cattagagag	ctgggctctg	caggattggg	gagagcctgg	9660
aaccaaccca	tcagaggggc	aggaatgcct	caccaggaaa	aacggacgcc	aagaggggaa	9720
atcaatgaga	cgtttccaaa	tgtttacctg	gcttgcaaa	atgcatccaa	gtagggagtt	9780
ccggttgctg	aaaatattga	agcagaagct	gaacaattgt	atcttggcaa	tgtcattgag	9840
gggttctggg	actgggggag	gctcgtccag	gtggccttca	ggcctcttct	gaaaaggaag	9900
tctatggctc	ccttccagaa	tacaaggcct	cctctcccat	ccaatgtgac	agccgcctac	9960
aagacagggg	aatgaaccca	gcacaggagc	taaaagcctt	ggcttctggg	gggctgggac	10020
ttgggtatgc	cacttgatct	ctttgcacct	cattttttcc	tctacaaaat	gggggttatt	10080

gtagtaatgg	tgtcctctca	gccccattga	gatccacatg	gtcacagctg	tgaatgtgcc	10140
ttgagtatgg	cgatgccctg	tgcagagggt	catgagaagg	tagcgtgtga	cggggtgggtg	10200
agtcacagcc	cacctctctt	cacactggct	caggcgttcc	ccgaggctct	caggggaagg	10260
aggggttgcc	ggaacaaggc	attgcgggag	gggagcaggc	atggggatca	caccagga	10320
gggcgctgctg	ggaaatggga	agaacctgcc	aacatatcct	gagccctctc	tccacagctg	10380
aggtctcttc	ccctggggcc	acagggtcca	gtgggggag	cgctctctgt	gtgggtgggg	10440
gtggccacag	cagtggcctc	tgccacaaca	acaggagcag	tggcatcagc	tgtccagctg	10500
tgaccagcag	tcacagcagc	tccaacatat	tcattgtctc	caagagatgg	cccaccaagg	10560
agagtcacag	cagccatgca	cctgcctcca	ctgccactcc	cctcaagccc	tcaagcttcc	10620
cagctccaag	gcttgatatt	tactgacgtc	ctacacacaa	aatcaacagc	aggaggtaca	10680
aggagcagga	agtggcttat	gagggtcatcc	tgtccatccc	tctgcctcca	gaaggtcccc	10740
acagaggtag	cccacctgct	cccgatctct	gcagggtcct	gcagggtcca	caggcatcca	10800
ttccaaccaa	tgttgactca	actgctctgt	gccaggacct	gggctagcac	tttgccttta	10860
agaagcttcc	agagtagggg	gtgcagtagg	gtctttcccc	tctgtctaa	gtcagacca	10920
cagcaaccac	aagacaaggc	ctcttatgca	gtccttccca	ggacctcaga	actgaccacg	10980
gtgccccaaa	gagactaagt	gcagtgtggg	cccaagtttc	cacacacctt	tctcattgca	11040
gatggaacag	ttttcccact	caggccagga	cacatcttgc	acacctgccc	acacatgcca	11100
cctcctcacc	tcctttcttc	cccctgcccc	ggccccagcc	aagtccccctg	acaactcccc	11160
ccagcaggat	atttgagtga	gaaatcaaca	cccttcaaaa	tatgatcaac	tcttgccttat	11220
tcataatata	atggaatgat	gttatcaaga	actcaaaagc	cctccatggc	ccagggctgc	11280
aatgaatgag	agttcatggc	caaatttctg	tcaagtctgc	tttatttaag	tcaatattag	11340
acctgctggt	cctaaacaga	aatgccctga	tgacagagga	gtgggagggg	agcaggctca	11400
tgtgaggggtg	tgggaaggcc	acttgcccca	aaatgtttgc	aagaaataca	ccaggaaaag	11460
cctattttaa	ttctcctgca	ttaggaactg	ccctgtgaga	ttcctgcaaa	ataatcctcc	11520
aggctcaga						11529

<210> 375

<211> 2218

<212> DNA

<213> Homo sapiens

<400> 375						
catggccagc	acatccacca	ccatcaggag	ccacagcagc	agccgcccggg	gtttcagtgcc	60
cagctcagcc	aggctcccctg	gggtcagccg	ctctggcttc	agcagcatct	ccgtgtcccc	120
ctccagtgcc	agtggtgccc	tgggtggcgc	atgtggagga	gctggctttg	gcagccgcag	180
tctgtatggc	ctggggggct	ccaagaggat	ctccattgga	gggggcagct	gtgccatcag	240
tggcggctat	ggcagcagag	ccggaggcag	ctatggcttt	gggtggcgccg	ggagtggatt	300
tggtttcggt	ggtggagccg	gcattggctt	tgggtctgggt	ggtggagccg	gccttgctgg	360
tggctttggg	ggccctggct	tcctctgtgt	ccccctgga	ggcatccaag	aggctactgt	420
caaccagagt	ctcctgactc	ccctcaacct	gcaaatgac	cccggccatcc	agcgggtgcg	480
ggccgaggag	cgtgagcaga	tcaagacctt	caacaacaag	tttgcctcct	tcatcgacaa	540
ggtgcggttc	ctagagcagc	agaacaaggt	tctggacacc	aagtggaccc	tgtgcagga	600
gcagggcacc	aagactgtga	ggcagaacct	ggagccgttg	ttcgagcagt	acatcaacaa	660
cctcaggagg	cagctggaca	gcattcgtgg	ggaacggggt	cgtctggact	cggagctgag	720
aaacatgcag	gacctggtgg	aggacctcaa	gaacaaatat	gaggatgaaa	tcaacaagcg	780
cacagcagca	gagaatgaat	ttgtgactct	gaagaaggat	gtggatgctg	cctacatgaa	840
caaggttgaa	ctgcaagcca	aggcagacac	tcttacagat	gagatcaact	tcctgagagc	900
cttgatgat	gcagagctgt	cccagatgca	gaccacatc	tcagacacat	ccgtgggtgct	960
atccatggac	aacaaccgca	acctggacct	ggacagcatc	atcgctgagg	tcaaggccca	1020
atatgaggag	attgctcaga	ggagcagggc	tgaggctgag	tcctgggtacc	agacaaagta	1080
cgaggagctg	caggctcacag	caggcagaca	tggggacgac	ctgcgcaaca	ccaagcagga	1140
gattgctgag	atcaaccgca	tgatccagag	gctgagatct	gagatcgacc	acgtcaagaa	1200
gcagtgtgcc	aacctacagg	ctgccattgc	tgatgctgag	cagcgtgggg	agatggccct	1260
caaggatgct	aagaacaagc	tgggaagggt	ggaggatgcc	ctgcagaagg	ccaagcagga	1320
cctggcccgg	ctgctgaagg	agtaccagga	gctgatgaac	gtcaagctgg	ccctggacgt	1380
ggagatcgcc	acctaccgca	agtgctgga	gggcgaggag	tgcaggctga	atggcggaagg	1440
cgttggacaa	gtcaacatct	ctgtagtcca	gtccaccgtc	tccagtggct	atggcggtgc	1500
cagcgggtgc	ggcagtggct	taggcctggg	tggagggaagc	agctactcct	atggcagtggt	1560
tcttggcggt	ggaggcggct	ttagtctcag	cagcggcaga	gccactgggg	gtggcctcag	1620
ctctgttggg	ggcggcagtt	ccaccatcaa	gtacaccacc	acctcctcct	ccagcaggaa	1680
gagctacaag	cactgaagtc	gtgccgccag	ctctcagctc	cacagctctc	aggccctctc	1740
ctggcagcag	agccctctcc	tcaggttgct	tgtcctcccc	tggcctccag	tctcccctgc	1800

cctcccgggt	agagctggga	tgccctcact	tttcttctca	tcaatacctg	ttccactgag	1860
ctcctgttgc	ttaccatcaa	gtcaacagtt	atcagcactc	agacatgcga	atgtcctttt	1920
tagttcccgt	attattacag	gtatctgagt	ctgccataat	tctgagaaga	aaaatgacct	1980
atatccccat	aagaactgaa	actcagtcta	ggtccagctg	cagatgagga	gtcctctctt	2040
taattgctaa	ccatcctgcc	cattatagct	acactcagga	gttctcatct	gacaagtcat	2100
ttgtcctgat	cttctcttgc	agtgtccctg	aatggcaagt	gatgtacctt	ctgatgcagt	2160
ctgcattcct	gcactgcttt	ctctgctctc	tttgccttct	tttgttctgt	tgaataaaa	2218

<210> 376

<211> 1986

<212> DNA

<213> Homo sapiens

<400> 376

cgcgccaacg	ctcgccacag	ccctctcctc	tccctggaacc	atggccagca	catccaccac	60
catcaggagc	cacagcagca	gccgccgggg	tttcagtgcc	aactcagcca	ggctccctgg	120
ggtcagccgc	tctggcttca	gcagcatctc	cgtgtcccgc	tccaggggca	gtggtggcct	180
gggtgggtgca	tgtggaggag	ctggcttttg	cagccgcagc	ttatatggcc	tggggggatc	240
caagaggatc	tccattggag	ggggcagctg	tgccatcagt	ggcggctatg	gcagcagagc	300
cagaggcagc	tatggctttg	gtggcgccgg	gagtggattt	ggtttcgggtg	gtggagccgg	360
cattggcttt	gatctgggtg	gtggagccgg	ccttgctggg	ggctttgggg	gccctggctt	420
ccctgtgtgc	ccccctggag	gcatccaaga	ggcactgtc	aaccagagtc	tcctgactcc	480
cctcaacctg	caaattgacc	ccgccatcca	gcgggtgcgg	gccgaggagc	gtgagcagat	540
caagaccctc	aacaacaagt	ttgcctcctt	catcgacaag	gtgcggttcc	tagagcagca	600
gaacaagggt	ctggacacca	agtggaccct	gctgcaggag	cagggcacca	agactgtgag	660
gcagaacctg	gagccgttgt	tcgagcagta	catcaacaac	ctcaggaggc	agctggacaa	720
catcgtgggg	gaacggggcc	gcctggactc	ggagctgaga	aacatgcagg	acctgggtgga	780
ggacctcaag	aacaaatatg	aggatgaaat	caacaagcgc	acagcagcag	agaatgaatt	840
tgtgactctg	aagaaggatg	tggatgctgc	ctacatgaac	aagggtgaac	tgcaagccaa	900
ggcagacact	ctcacagatg	agatcaactt	cctgagagcc	ttgtatgatg	cagagctgtc	960
ccagatgcag	accacatctt	cagacacatc	cgtgggtgcta	tccatggaca	acaaccgcaa	1020
cctggacctg	gacagcatca	tcgctgaggt	caaggcccaa	tacgaggaga	ttgctcagag	1080
gagccgggct	gaggctgagt	cctggtacca	gaccaagtac	gaggagctgc	aggtcacagc	1140
aggcagacat	ggggacgacc	tgcgcaacac	caagcaggag	attgctgaga	tcaaccgcat	1200
gatccagagg	ctgagatctg	agatcgacca	tgtcaagaag	cagtgtgcca	gcctgcaggc	1260
tgccattgct	gatgctgagc	agcgtgggga	gatggccctc	aaggatgcta	agaacaagct	1320
ggaagggctg	gaggatgccc	tgcagaaggc	caagcaggac	ctggcccggc	tgctgaagga	1380
gtaccaggag	ctgatgaatg	tcaagctggc	cctggacgtg	gagatcgcca	cctaccgcaa	1440
gctgctggag	ggcgaggagt	gcaggctgaa	tggcgaaagg	attggacaag	tcaacgtctc	1500
tgtagtacag	tccaccatct	ccagtggcta	tggcgtgctc	agtgggtgtc	gcagtggctt	1560
aggcctgggt	ggaggaagca	gctactccta	tggcagtggg	cctggcattg	gaggtggctt	1620
cagttccagc	agtggcagag	ccattggggg	tggcctcagc	tctgttggag	gcggcagttc	1680
caccatcaag	tacaccacca	cctcctctct	cagcaggaag	agctacaagc	actaaagtgc	1740
tgccctcagc	tctcggtccc	acagtctctc	ggcccttctc	tggctgcaga	gccgtctctt	1800
caggttgccct	gtcgtctcct	ggcctctagt	cttcctgctc	ctccgaggta	gagctgggta	1860
tggatgctta	gtgccctcac	ttctctctgt	ctatacctgc	cccatctgag	cacccattgc	1920
tcaccatcag	atcaaccttt	gattttacat	cataatgtat	tcaccactgg	agcttcactt	1980

<210> 377

<211> 2222

<212> DNA

<213> Homo sapiens

<400> 377

catggccagc	acatccacca	ccatcaggag	ccacagcagc	agccgccggg	gtttcagtgc	60
caactcagcc	aggctccctg	gggtcagccg	ctctggcttc	agcagcatct	ccgtgtcccg	120
ctccaggggc	agtgggtggc	tgggtgggtg	atgtggagga	gctggctttg	gcagccgcag	180

cttatatggc	ctgggggggat	ccaagaggat	ctccattgga	gggggcagct	gtgccatcag	240
tggcggctat	ggcagcagag	ccagagcgag	ctatggcttt	ggtggcgccg	ggagtggatt	300
tggtttcggg	ggtggagccg	gcattggctt	tgatctgggt	ggtggagccg	gccttgctgg	360
tggctttggg	ggccctggct	tcctgtgtg	ccccctgga	ggcatccaag	aggtcactgt	420
caaccagagt	ctcctgactc	ccctcaacct	gcaaatgac	cccgccatcc	agcgggtgcg	480
ggccgaggag	cgtgagcaga	tcaagaccct	caacaacaag	tttgcctcct	tcacgcagaa	540
ggtgcggttc	ctggagcagc	agaacaaggt	tctggaaaca	aagtggaccc	tgctgcagga	600
gcagggcacc	aagactgtga	ggcagaacct	ggagccgttg	ttcgagcagt	acatcaacaa	660
cctcaggagg	cagctggaca	gcattgtcgg	ggaacggggc	cgcttgga	cagagctcag	720
aggcatgcag	gacctggtgg	aggacttcaa	gaacaaatat	gaggatgaaa	tcaacaagcg	780
cacagcagca	gagaatgaat	ttgtgactct	gaagaaggat	gtggatgctg	cctacatgaa	840
caaggttgaa	ctgcaagcca	aggcagacac	tctcacagac	gagatcaact	tcttgagagc	900
cttgatgat	gcagagctgt	cccagatgca	gacccacatc	tcagacacat	ctgtggtgct	960
gtccatggac	aacaaccgca	acctggacct	ggacagcatc	atcgctgagg	tcaaggccca	1020
atatgaggag	attgctcaga	gaagccgggc	tgaggctgag	tcctgggtacc	agaccaagta	1080
cgaggagctg	caggtcacag	caggcagaca	tggggacgac	ctgcgcaaca	ccaagcagga	1140
gattgctgag	atcaaccgca	tgatccagag	gctgagatct	gagatcgacc	acgtcaagaa	1200
gcagtgcgcc	aacctgcagg	ccgccattgc	tgatgctgag	cagcgtgggg	agatggccct	1260
caaggatgcc	aagaacaagc	tggaaaggct	ggaggatgcc	ctgcagaagg	ccaagcagga	1320
cctggcccg	ctgctgaagg	agtaccagga	gctgatgaat	gtcaagctgg	ccctggacgt	1380
ggagatcgcc	acctaccgca	agctgctgga	gggtgaggag	tgacggctga	atggcggaagg	1440
cgttggacaa	gtcaacatct	ctgtggtgca	gtccaccgtc	tcacgtggct	atggcggtgc	1500
cagtgggtgc	ggcagtggtc	taggcctggg	tggaggaagc	agctactcct	atggcagtg	1560
tcttggcggt	ggagggtggt	tcagttccag	cagttggcaga	gccattgggg	gtggcctcag	1620
ctctgttggg	ggcggcagtt	ccaccatcaa	gtacaccacc	acctcctcct	ccagcaggaa	1680
gagctataag	cactaagtgc	gtctgctagc	tctcggtccc	acagtcctca	ggccctctc	1740
tggctgcaga	gccctctcct	caggttgctt	gtcctctcct	ggcctccagt	ctccctgct	1800
gtcccaggtg	gagctgggga	tgaatgctta	gtgccctcac	ttcttctctc	tctctctata	1860
ccatctgagc	acctattgct	caccatcaga	tcaacctctg	attttacatc	atgatgtaat	1920
caccactgga	gcttcactgt	tactaaatta	tttaatttctt	gcctccagt	ttctatctct	1980
gaggctgagc	attataagaa	aatgacctct	gtccttttct	attgcagaaa	attgccagg	2040
gcttatttca	gaacaacttc	cacttacttt	ccactggctc	tcaaaactctc	taacttataa	2100
gtgtgtgaa	ccccaccaca	ggcagtatcc	atgaaagcac	aagtgactag	tcctatgatg	2160
tacaaagcct	gtatctctgt	gatgatttct	gtgctcttca	ctctttgcaa	ttgctaaata	2220
aa						2222
<210>	378					
<211>	2270					
<212>	DNA					
<213>	Homo sapiens					
<400>	378					
ctcctccagc	ctctcacact	ctcctcagct	ctctcatctc	ctggaaccat	ggccagcaca	60
tccaccacca	tcaggagcca	cagcagcagc	cgccgggggt	tcagtgccaa	ctcagccagg	120
ctccctgggg	tcagccgctc	tggcttcagc	agcgtctccg	tgtcccgcctc	caggggcagt	180
ggtggcctgg	gtggtgcatg	tggaggagct	ggctttggca	gccgcagtct	gtatggcctg	240
gggggctcca	agaggatctc	cattggagg	ggcagctgtg	ccatcagtgg	cggctatggc	300
agcagagccg	gaggcagcta	tggctttggg	ggcggcgga	gtggatttgg	tttcgggtgg	360
ggagccggca	ttggctttgg	tctgggtggg	ggagccggcc	ttgctgggtg	ctttgggggc	420
cctggcttcc	ctgtgtgccc	ccctggaggc	atccaagagg	tcaccgtcaa	ccagagtctc	480
ctgactcccc	tcaacctgca	aatcgatccc	accatccagc	gggtgccccg	tgaggagcgt	540
gaacagatca	agacctcaa	caacaagttt	gcctccttca	tcgacaagg	gcggttcctg	600
gagcagcaga	acaaggttct	ggaaacaaag	tggaccctgc	tgacaggagca	gggcaccaag	660
actgtgaggc	agaacctgga	gccgttggtc	gagcagtaca	tcaacaacct	caggaggcag	720
ctggacagca	ttgtcgggga	acggggccgc	ctggactcag	agctcagagg	catgcaggac	780
ctggtggagg	acttcaagaa	caaatatgag	gatgaaatca	acaagcgcac	agcagcagag	840
aatgaatttg	tgactctgaa	gaaggatgtg	gatgctgcct	acatgaacaa	ggttgaactg	900
caagccaagg	cagacactct	cacagacgag	atcaacttcc	tgagagcctt	gtatgatgca	960
gagctgtccc	agatgcagac	ccacatctca	gacacatctg	tgggtgctgtc	catggacaac	1020
aaccgcaacc	tggacctgga	cagcatcacc	gctgaggtca	aggcccaata	tgaggagatt	1080
gctcagagaa	gccgggctga	ggctgagtc	tgggtaccaga	ccaagtacga	ggagctgcag	1140
gtcacagcag	gcagacatgg	ggacgacctg	cgcaacacca	agcaggagat	tgctgagatc	1200

aaccgcatga	tccagaggct	gagatctgag	atcgaccacg	tcaagaagca	gtgcgccaac	1260
ctgcaggccg	ccattgctga	tgctgagcag	cgtggggaga	tggccctcaa	ggatgccaaag	1320
aacaagctgg	aagggtctga	ggatgccctg	cagaaggcca	agcaggacct	ggcccggctg	1380
ctgaaggagt	accaggagct	gatgaatgtc	aagctggccc	tggacgtgga	gatcgccacc	1440
taccgcaagc	tgctggagg	tgaggagtgc	aggctgaatg	gcgaaggcgt	tggacaagtc	1500
aacatctctg	tggtgcagtc	caccgtctcc	agtggctatg	gcggtgccag	tggtgtcggc	1560
agtggcttag	gcctgggtgg	aggaagcagc	tactcctatg	gcagtggctc	tggcgttgga	1620
ggtagcttca	gttccagcag	tggcagagcc	attgggggtg	gcctcagctc	tgttgagggc	1680
ggcagttcca	ccatcaagta	caccaccacc	tctctctcca	gcaggaagag	ctataagcac	1740
taaagtgcgt	ctgctagctc	tcgggtccac	agtcctcagg	cccctctctg	gctgcagagc	1800
cctctctcca	ggttgctctg	cctctctctg	cctccagctc	cccctgctgt	cccaggtaga	1860
gctggggatg	aatgcttagt	gcctcactt	cctctctctc	tctctatacc	atctgagcac	1920
ccattgctca	ccatcagatc	aacctctgat	tttacctcat	gatgtaatca	ccactggagc	1980
ttcactgtta	ctaaattatt	aatttcttgc	ctccagtgtt	ctatctctga	ggctgagcat	2040
tataagaaaa	tgacctctgc	tccttttcat	tgcaaaaaat	tgccaggggc	ttatttcaga	2100
acaacttcca	cttactttcc	actggctctc	aaactctcta	acttataagt	gttgtgaacc	2160
cccaccagg	cagtatccat	gaaagcaca	gtgactagtc	ctatgatgta	caaagcctgt	2220
atctctgtga	tgatttctgt	gctcttcact	gtttgcaatt	gctaaataaa		2270

<210> 379

<211> 2301

<212> DNA

<213> Homo sapiens

<400> 379

tcgacagctc	tctcgcccag	cccagttctg	gaagggataa	aaagggggca	tcaccgttcc	60
tggttaacag	agccaccttc	tgctccctgc	tgagctctgt	tctctccagc	acctcccaac	120
ccactagtgc	ctggttctct	tgctccacca	ggaacaagcc	accatgtctc	gccagtcaag	180
tggtgtcctc	cggagcgggg	gcagtcgtag	cttcagcacc	gcctctgcca	tcaccccgctc	240
tgctctccgc	accagcttca	cctccgtgtc	ccgggtccggg	ggtggcgggtg	gtggtggctt	300
cggcagggtc	agccttgccg	gtgcttgtgg	agtgggtggc	tatggcagcc	ggagcctcta	360
caacctgggg	ggctccaaga	ggatatccat	cagcactaga	ggaggcagct	tcaggaaccg	420
gtttggtgct	ggtgctggag	gcggctatgg	cttgaggagt	ggtgcccgtg	gtggatttgg	480
tttcggcggg	ggagctgggtg	gtggctttgg	gctcgggtgg	ggagctggct	ttggagggtgg	540
cttcgggtgg	cctggctttc	ctgtctgccc	tcttgagggt	atccaagagg	tcactgtcaa	600
ccagagtctc	ctgactcccc	tcaacctgca	aatcgacccc	agcatccaga	gggtgaggac	660
cgaggagcgc	gagcagatca	agaccctcaa	caataagttt	gcctccttca	tcgacaaggt	720
gcggttccctg	gagcagcaga	acaaggttct	ggacaccaag	tggaccctgc	tcaggagcca	780
gggcaccaag	actgtgaggc	agaacctgga	gccgttgttc	gagcagtaca	tcaacaacct	840
caggaggcag	ctggacagca	tcgtggggga	acggggccgc	ctggactcag	agctgagaaa	900
catgcaggac	ctggtggaag	acttcaagaa	caagtatgag	gatgaaatca	acaagcgtac	960
cactgctgag	aatgagtttg	tgatgctgaa	gaaggatgta	gatgctgcct	acatgaacaa	1020
ggtggagctg	gaggccaagg	ttgatgcact	gatggatgag	attaacttca	tgaagatgtt	1080
ctttgatgcg	gagctgtccc	agatgcagac	gcattgtctc	gacacctcag	tggtcctctc	1140
catggacaac	aaccgcaacc	tggacctgga	tagcatcatc	gctgaggtca	aggcccagta	1200
tgaggagatt	gccaaccgca	gccggacaga	agccgagtcc	tggtatcaga	ccaagtatga	1260
ggagctgcag	cagacagctg	gccggcatgg	cgatgacctc	cgcaacacca	agcatgagat	1320
cacagagatg	aaccgatga	tccagaggct	gagagccgag	attgacaatg	tcaagaaaca	1380
gtgcgccaat	ctgcagaacg	ccattgcgga	tgccgagcag	cgtggggagc	tggccctcaa	1440
ggatgccagg	aacaagctgg	ccgagctgga	ggaggccctg	cagaaggcca	agcaggacat	1500
ggcccggctg	ctgcgtgagt	accaggagct	catgaacacc	aagctggccc	tggacgtgga	1560
gatcgccact	taccgcaagc	tgctggagg	cgaggaatgc	agactcagtg	gagaaggagt	1620
tggaccagtc	aacatctctg	ttgtcacaa	cagtggttcc	tctggatatg	gcagtggcag	1680
tggctgctgg	ggtggcctcg	gtggaggtct	tggcggcgcc	ctcgggtggg	gtcttgccgg	1740
aggtagcagt	ggaagctact	actccagcag	cagtgggggt	gtcggcctag	gtggtgggct	1800
cagtgtgggg	ggctctggct	tcagtgcaag	cagtggccga	gggctggggg	tgggcttttg	1860
cagtggcggg	ggtagcagct	ccagcgtcaa	atttgtctcc	accacctcct	cctcccggaa	1920
gagcttcaag	agctaagaac	ctgctgcaag	tcactgcctt	ccaagtgcag	caaccagcc	1980
catggagatt	gcctcttcta	ggcagttgct	caagccatgt	tttatccttt	tctggagagt	2040
agtctagacc	aagccaattg	cagaaccaca	ttctttgggt	cccaggagag	ccccattccc	2100
agccctgggt	ctcccgtgcc	gcagttctat	attctgcttc	aaatcagcct	tcagggtttcc	2160
cacagcatgg	cccctgctga	cacgagaacc	caaagttttc	ccaaatctaa	atcatcaaaa	2220

cagaatcccc accccaatcc caaatTTTTgt tttggttcta actacctcca gaatgtgttc 2280
 aataaaatgc ttttataata t 2301
 <210> 380

<211> 2255

<212> DNA

<213> Homo sapiens

<400> 380
 ccttctctccc tcttgcattc gagctttgtc tccaccagca acatgagccg ccaattcacc 60
 tgcaagtccg gagctgccgc caaggggggc ttcagtggct gctcagctgt gctctcaggg 120
 ggcagctcat cctccttccg ggcagggagc aaaggggtca gtgggggctt tggcagccgg 180
 agcctctaca gcctgggggg tgtccggagc ctcaatgtgg ccagtggcag cgggaagagt 240
 ggaggctatg gatttggccg gggccgggccc agtggctttg ctggaagcat gtttggcagt 300
 gtggcccttg ggctgtgtg cccaactgta tggccacctg gaggcattcca ccaggttacc 360
 gtcaatgaga gcctcctggc cccctcaac gtggagctgg accccgagat ccagaaagtg 420
 cgtgcccagg agcgagagca gatcaaggct ctgaacaaca agttcgccctc cttcatcgac 480
 aaggtgccgt tcttggagca gcagaaccag gtactggaga ccaagtggga gctgctgcag 540
 cagctggacc tgaacaactg caagaacaac ctggagccca tcctcgaggg ctacatcagc 600
 aacctgccga agcagctgga gacgtgtctc ggggacaggg tgaggctgga ctccgagctg 660
 aggaatgtgc gggacgtagt ggaggactac aagaagaggt atgaggagga aatcaacaag 720
 cggacagcag cagagaacga gtttgtgtc ctcaagaagg atgtggatgc tgcctacgcc 780
 aataaggtgg aactgcaggc caaggtggaa tccatggacc aggagatcaa gttcttcagg 840
 tgtctctttg aagccgagat cactcagatc cagtcccaca tctgtgacat gctgtcattc 900
 ctgtccatgg acaacaaccg gaacctagac ctggacagca tcattgacga agtccgcacc 960
 cagtatgagg agattgcctt gaagagtaag gccgaggctg aggcctctgt ccagaccaag 1020
 ttccaagagc ttcagctggc agctggcagg catggggacg acctcaaaaa caccaagaat 1080
 gaaatctcgg agctcactcg gctcatccag agaatccgct cagagatcga gaacctgaag 1140
 aagcaggctt ccaacctgga gacagccatc gctgatgctg agcagcgggg agacaacgcc 1200
 ctgaaggatg cccggggccaa gctggacgag ctggaggggc cctgcacca ggccaaggag 1260
 gagctggcgc ggatgctgcg cgagtaccag gagctcatga gcctgaagct ggccctggac 1320
 atggagatcg ccacctatcg caagctactg gagagcgagg agtgcaggat gtcaggagaa 1380
 tttccctccc ctgtcagcat ctccatcatc agcagcacca gtggcggcag tgtctatggc 1440
 ttccggccca gcatggtcag cgggtggctat gtggccaaca gcagcaactg catctctgga 1500
 gtgtgcagcg tgagaggcgg ggagggcagg agccggggca gtgccaacga ttacaaagac 1560
 accctaggga aggggtccag cctgagtga ccctccaaga aaaccagtcg gttagagaaga 1620
 ctgccccggg ccccgccctc ttccatgacc cggctctgga tcccacactg tacttcccac 1680
 agcccaactc cagctccatc tccaccctgc tggctctgct cccatacacc tggcactggc 1740
 cttggccacc cacttctccc agcctgtgtc ttctgatcc tgggaaggcc tggatgacca 1800
 agcttggatg aattcctccc tgtacacacc ctattaactc cttggctgtg gtccccagc 1860
 tacaccacca gccaggtcc tggctgccag ctttctctct ctgcccggcc tctagcgag 1920
 tcgctaacta ctctgctggg ctccctgggt ctctgcccga gggcccgcac acactgggac 1980
 ctagcatagt tcttgcctat gccaggagct ggctctgtgt ttaagaaaag gaggactgaa 2040
 ggacaaaaca ccaagagtgg cccagtcctc acccccacat ctagctcagt ctcaaatctg 2100
 agtgggacca agtgcaattc agggcctttt tctccactca cctgcaccca gaagcagaga 2160
 aaagcaggca ctgttcactt ttcttttatt cttaatggcc ttctctgtt gcaacctcaa 2220
 taacagcac aatctcaaaa aaaaaaaaaa aaaaa 2255
 <210> 381

<211> 2856

<212> DNA

<213> Homo sapiens

<400> 381
 ccttggagac tgcctttctc cagctctgtc aactcaacct ttcccacat gagtcggcaa 60
 ctgaacatca agtccagtgg tgacaagggc aacttcagtg tgcattcgcc agtggtgcca 120
 aggaaggctg tgggtagcct ggcttcttac tgtgcagctg gcagaggggc tggcgctggc 180
 tttggcagtc ggagcctcta tagccttggga ggggaatcggc gtatttcttt caatgtggct 240

```

gggtggcgcg ttcgggctgg aggttacggc ttcaggcctg gctctgggta tggagggggc 300
cgggccagtg gctttgctgg cagtatgttt ggcagtgctg ccctggggcc tgcattgtttg 360
tctgtgtgcc cacctggggg catccaccag gtcactgtca acaagagcct cttggccccc 420
ctcaacgtgg agctgggacc tgagatccag aaggtgctcg ccaggagcg ggaacagatc 480
aaggtgctga acgacaagtt cgctccttc attgacaagg tacgcttcct agagcagcag 540
aaccaggttc tagaaaccaa gtgggagctg ctgcagcagc tggacctgaa caactgcaag 600
aagaacctgg agcccatcct tgagggtac atcagcaacc tggcgaagca gctggagaca 660
ctgtctgggg acaggggtgag gctggactcg gagctgagaa gcatgaggga tctggtggag 720
gactataaga agagatatga ggtggagatt aaccggcgca caacagcaga gaatgagttt 780
gtggtgctta agaaggatgc agatgcagcc tacgcagtca aggtggagct tcaggccaaa 840
gtggactcac tggacaaaga catcaagttc ctcaagtgct tgtatgatgc agagatcgct 900
cagatccaga ctacgccag tgagacctct gtcatcctgt ccatggacaa caaccgggac 960
ctggaccttg acagcatcat cgctgaggtc cgcatgcatt atgaggagat cgccctgaag 1020
agcaaggctg aggccgagcg cctgtaccag accaagatcc aggagctgca gctggcagcc 1080
agtccgcatg gtgacgacct gaaacacacc aggagcgaga tgggtggagct gaaccggctc 1140
atccagagga tccggtgtga gatcgggaat gtgaagaagc agcgtgccag cctggagacg 1200
gccatcgctg acgctgagca gcggggagac aatgccctga aggatgcccc ggccaagctg 1260
gatgagctgg agggcgccct gcaccaggcc aaggaggagc tggcgcggat gctgcgcgag 1320
taccaggagc tcatgagcct gaaactggcc ctggacatgg agattgccac ctaccgcaag 1380
ctgctggagg gcgaggagtg caggatgtct ggtgagaatc catcctctgt gagcatctct 1440
gtcatcagca gtagcagcta cagctaccac caccacagct ctgcgggtgt tgaccttggg 1500
gccagcgctg tggcaggcag ctctggcagc acccagagcg ggcagaccaa gaccacagag 1560
gcgcgagggg gagacctcaa ggacaccag ggcaagagca cccagccag catcccagca 1620
aggaagcca cccgtagac ccatggcctc acccactca gcacttggaa gaagaggtga 1680
ctttgccacc cccaaagggt tctgccacac ccaagttccc aggccctgag ttttaaaact 1740
gtctgtagta cactcaactg tctgcatcgt ggttttagct ttactttcaa gctctgattg 1800
acacagtcac ctccctgtt tccttaggtc ccatgtggac taacgacttc tcattttcct 1860
cgctgccttt ggctggcagg aggctttgga ggcacaagcc attataacct tcttggccct 1920
aaggaagctg tgatcatccc tagaaagagg gaaggagcag gagacgacag gggaggggct 1980
ggtttgttct gtgcttaggc caagttagct actgtctgag aggttttaca tcccctgcca 2040
gcatgggtgg gtgacacgag acctgtaagc aggtgggtgag aagttagaca gcctttactt 2100
gctccatcag aaacaacttt gcaggatgac gccaatatth aggacaccac gtgtacatct 2160
gtagaccacc agctgcaccc atctccacaa agccaagtga aggtgtattg gggatttctt 2220
gccagcctgt gtcacccacc cacctccttc attatcagca atagctacca tcatttgtca 2280
agcacctact agatgccaga caccctacac atattgcctc ctatttctcat ccattcctgc 2340
aaagaagatg caatgagcat ccttggaaac gactgggagc ctgatcccaa gaggctgctg 2400
aactggcccc agtcacccac ctatgtgcca gagtcaggcc tggccgacac aaggatctat 2460
gctttttctg tgggtgtgtca ctgccttttt aacaaaaggg ctgtcaaagt caccattctt 2520
tttgatgagg gcagcgtaat tacattgcct tttgtcagga ctgtgggtat gtgatttgtc 2580
ttccacagtc tctctggggc tgtgtcctac atagcttctg actctcaatt tttggtgcca 2640
tgagctgagc tcaagtgtgt gagctggctt ttctgtcgct gagtgggtact gcctagtcca 2700
gatgtcgtgg ctacgggtgt aaatatcctt aagaatggca gcatctatth cctcttttgt 2760
ttgaattaaa gactctgaat ttctgtgtaa aaaaaaaaaa aaaaaaaaaa 2820
aaaaaaaaaa aaaaaaaaaa aaaaaaa 2856

```

<210> 382

<211> 1985

<212> DNA

<213> Homo sapiens

<400> 382

```

gcggctgttt gcgccccttc tgccctccgc gcggccagca ccggtacttg cgagccatga 60
gccgccaaact gacccatttc ccccgcgggg agcgccctgg ctccagcggg tgctccgcgg 120
tcctctcttg cgggatcggc agcagctccg cctcattccg ggcccgggtc aagggtctcg 180
cctcctttgg cagcaagagc ctctcctgcc ttgggggagc ccgaagcctg gcgctcagcg 240
ctgctgcacg gcggggcggc ggccgctggt gcggcttcgt gggcaccgcc ttcggcagcg 300
ccgggctggg gcccaagtgt ccctccgtgt gccaccccg gggcatccct caggtcaccg 360
tcaacaagag cctcctggcc ccgctcaacg tggagatgga ccccgagatc cagagggtgc 420
gcgcccagga gcgggagcag atcaaggcgc taacacaaca gttcgcctcc ttcctcagca 480
aggctcggtt cctggagcag cagaatcagg tgctagagac caagtggaaac ctccctagac 540
agctggactt gaacaactgc aggaagaacc tggagcccat ttatgagggc tacatcagca 600
acctgcagaa gcagctggag atgctgtctg gggacggggt gaggtggat tcggagctga 660

```


ggaacatgca	ggattttggtg	gaggactaca	agaagaggta	tgagggtggag	attaacagac	720
gcacagctgc	tgagaatgag	tttgtggtgc	tcaagaagga	cgtggatgct	gcttacatga	780
ataaggttga	gctccaggcc	aaggtggact	ccttgacaga	tgagattaaa	ttcttcaagt	840
gcctttatga	aggggagatc	actcagatcc	agtcccacat	cagcgacacg	tccatcgctc	900
tgtcaatgga	caacaaccgg	gatctggacc	tggacagcat	cattgccgag	gtccgtgccc	960
agtacgagga	gattgcccta	aagagcaagg	ccgaggctga	gacctgtac	cagaccaaga	1020
tccaggagct	gcaggtcaca	gcaggccagc	atggggatga	cctcaagctc	accaaggctg	1080
aaatctctga	gctcaaccgc	ctgatccaga	ggatccgctc	agagataggg	aatgtgaaga	1140
agcagtgtgc	cgatctggag	acggccatcg	ccgacgctga	acagcggggg	gactgcgccc	1200
tgaagaatga	ccggggcaag	ctggatgagc	tggaggcgcg	cctgcaccag	gccaaggagg	1260
agctggcacg	gatgctgcgt	gagtaccagg	agctcgtgag	cctgaagctg	gccctggata	1320
tggagatcgc	cacctaccgc	aagctgctgg	agagcgagga	gtgcaggatg	tctggcgaat	1380
atccaaattc	tgtgagcatc	tccgtcatca	gcagcaccaa	tgctggggca	ggaggggctg	1440
gcttcagcat	gggctttggc	gcctcaagca	gttatagcta	caaaactgca	gctgcagacg	1500
tcaagaccaa	aggcagctgt	ggcagtgagc	tcaaggatcc	ccttgccaaa	acctcgggga	1560
gcagctgtgc	caccaaaaag	gcctccagat	gatggacaag	tggttggctc	tgtgagcaga	1620
aggcttccca	actcaccctg	ctcctccctc	tccttccctg	ggctcccttt	ccaagtcaag	1680
aaatgctttg	tctgtcacta	cagtcccaac	cccatttcct	ctccctgttg	tcctcaagggt	1740
gtgatgcttc	gatgcaagga	gtccagttag	gagctctctc	agtggcctcc	ttcttggctc	1800
cgtttcgttg	ggtcattgct	tgaaatgcaa	agacaacact	taccaggat	gtttccccaa	1860
ggccagctac	aagccctctc	gccccatgct	ctttcttggg	ccttcactac	caaggggactc	1920
tcttcatctt	ctgattggga	ttgtgtccag	tcctctgctt	cttctgcaat	aatgatttaa	1980
atctg						1985

<210> 383

<211> 2323

<212> DNA

<213> Homo sapiens

<400> 383

tcagcatctt	atccccactt	tctggcctcc	ccaccatgag	ccgccaatc	acctacaagt	60
cgggagctgc	tgccaagggg	ggcttcagcg	gctgctccgc	tgtgctctca	gggggcagct	120
catcctccta	ccgagcaggg	ggcaaagggc	tcagtggagg	cttcagcagt	cggagccttt	180
acagcctggg	gggtgcccgg	agcatctctt	tcaatgtggc	cagtggcagt	gggtgggcag	240
gaggctatgg	atttgcccg	ggccggggcca	gtggctttgc	tggcagcatg	tttggcagtg	300
tggccttggg	gtccgtgtgt	ccgtcgttgt	gccgcctgg	gggtatccat	caggtcacca	360
tcaacaagag	cctcctggca	ccctgaacg	tggagctgga	ccctgaaatc	cagaaagtgc	420
gtgcccagga	gcgggagcag	atcaaggtgc	tgaacaacaa	gttcgcctcc	ttcattgaca	480
aggtgcggtt	cctggagcag	cagaaccagg	tgctggagac	caagtgggag	ctgctacagc	540
agctggacat	gaacaactgc	aagaataacc	tggagcccat	ccttgagggc	tacatcagca	600
acctgcggaa	gcagctggag	acgctgtctg	gggacagggt	gaggctggac	tcggatctga	660
ggagcgtgcg	cgaagtgggtg	gaggactaca	agaagaggta	tgaagaagaa	ataaacaagc	720
gcacaactgc	tgagaatgaa	tttgtggtgc	ttaagaagga	cgtggacgca	gcttacacga	780
gcaaagtggg	gctgcaggcc	aaggtggatg	ccctggatgg	agaaatcaag	ttcttcaagt	840
gtctgtacga	gggggagact	gctcagatcc	agtcccacat	cagcgacacg	tccatcatcc	900
tgtccatgga	caacaaccgg	aacctggacc	tggacagcat	cattgctgag	gtccgtgccc	960
agtatgagga	gatcgcccgg	aagagcaagg	ccgaggccga	ggccctgtac	cagaccaagt	1020
tccaggagct	gcagctagca	gccggccggc	atggggatga	cctgaaacac	accaaaaaatg	1080
agatctcaga	gctgaccctg	ctcatccaaa	gactgcgctc	ggagattgag	agtgtgaaga	1140
agcagtgtgc	caacctggag	acggccatcg	ctgacgccga	gcagcggggg	gactgtgccc	1200
tcaaggatgc	cagggccaag	ctggatgagc	tggaggcgcg	cctgcagcag	gccaaggagg	1260
agctggcacg	gatgctgcgc	gagtaccaag	agcttttgag	cgtgaagctg	tccctggata	1320
ttgagatcgc	cacctaccgc	aagctgctgg	agggcgagga	gtgcaggatg	tccggagaat	1380
ataccaactc	cgtgagcatt	tccgtcatca	acagctccat	ggccgggatg	gcaggcacag	1440
gggctggctt	tggattcagc	aatgctggca	cctacggcta	ctggcccagc	tctgtcagcg	1500
ggggctacag	catgctgcct	gggggctgtg	tcactggcag	tgggaactgt	agccccctg	1560
gggaagccag	gaccaggctg	gggagtgcga	tggaattcag	ggactccag	ggaaagacct	1620
tagctctaag	ctcaccacc	aaaaaaacca	tgagataaaa	gtgcaacaca	gcccatttcc	1680
cagtagtctg	ccttgccctg	gcagactgct	ccggactctt	ctaggaaatt	cctctgtctc	1740
atttgtcttc	atctccttct	tgctttgctt	tgctgtggac	ctctcctcct	tctccttgac	1800
ctctctgcct	cagtctttgt	taatgttgaa	tcaggatttg	agagctggag	cccatcttcc	1860
tgcctccatc	caaagaggcc	ttttaactca	gcctccctt	ctggaagaag	acttggcctt	1920

ttctctgcct	gcatgtccct	gtgcagagga	aggctgtctc	tcaagggtta	ccccaatctg	1980
cctgtgtctg	tctttcctac	cctgtctcag	taactatttg	gccatgtgct	ccctgggtac	2040
acaagttttc	agatctactg	atagacctgc	aggaactctc	tcatgttaga	gcaatactgg	2100
ctcaggcaaa	acacctgggtg	ggaagttgta	tcttgtagat	ccactgcata	ttacatagcc	2160
aggagtaccc	cttgaggcta	attctaccaa	ccaagggtat	tgtgtctctc	atctgtgggt	2220
acttgtcctt	gtttaggcct	cacctccctg	ctcctgtgtc	ttaccaataa	acttataaag	2280
ccccaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaa		2323

<210> 384

<211> 2427

<212> DNA

<213> Homo sapiens

<400> 384

agcctgtgac	tttccctccct	ggacaaaggc	atcatgagtt	gtcagatctc	ttgcaaatct	60
cgagggaagag	gaggaggtgg	aggaggattc	cggggcttca	gcagcggctc	agctgtgggtg	120
tctggtggaa	gccggagatc	aacttccagc	ttctcctgct	tgagccgccca	tggtgggtgg	180
ggcgggggct	tcgggtggagg	cggctttggc	agtcggagtc	ttgttggcct	tgaggggacc	240
aagagcatct	ccattagtgt	ggctggagga	gggtgggtgg	ttggcgccgc	tggtggattt	300
ggtggcagag	gaggtggttt	tggaggcggc	agcggctttg	gaggcggcag	cggctttgga	360
ggtggcagcg	gcttcagtgg	tggtgggttc	gggtggaggc	gctttgggtg	aggcgcgttt	420
ggaggttttg	ggggccctgg	tggtgttgga	ggtttagggg	gtcctgggtg	ctttgggcct	480
ggaggatacc	ctggtggcat	ccacgaagtc	tctgtcaacc	agagcctcct	gcagcctctc	540
aacgtgaaag	ttgaccaga	gatccagaat	gtgaaggccc	aagagcgtga	gcagatcaaa	600
actctcaaca	acaaatttgc	ctccttcatt	gacaagggtg	ggttcttgga	gcagcagaac	660
caggtgttac	agaccaaag	ggagctgcta	caacaaatga	atgttggcac	ccgccccatc	720
aacctggagc	ccatcttcca	gggttatatc	gacagcctca	agagatatct	ggatgggctc	780
actgcagaaa	gaacatcaca	gaattcagag	ctgaataaca	tgaggatctc	tggtggaggat	840
tataagaaga	agtatgagga	tgaatcaat	aagcgcacag	ctgctgagaa	tgatttttgt	900
acgcttaaaa	aggacgtgga	caatgcctac	atgataaagg	tggagttgca	gtccaagggtg	960
gacctgctga	accaggaaat	tgagtttctg	aaagtttctc	atgatgcgga	gatatcccag	1020
atacatcaga	gtgtcactga	caccaacgtc	atcctctcca	tggaacaacag	ccgcaacctg	1080
gacttgagata	gcatcatcgc	cgagggtcaag	gcccagtatg	aggagatcgc	ccagaggagc	1140
aaggaagaag	cggaggccct	gtaccacagc	aagtatgagg	agctccagggt	gactgtcggg	1200
agacatggag	acagcctgaa	agagatcaag	atagagatca	gagagctgaa	ccgctgatac	1260
cagaggctgc	agggggagat	cgcacatgtg	aagaagcagt	gtaagaatgt	gcaagatgcc	1320
atcgagagtg	ccgagcagcg	tggggagcat	gccctcaagg	atgccaggaa	caagttgaat	1380
gacctggagg	aggccctgca	gcaggccaag	gaggacttgg	cgcggctgct	gcgtgactac	1440
caggagctga	tgaacgtgaa	gctggcccta	gatgtggaga	tcgccacctc	ccgcaaaactg	1500
ctggaggggc	aggagtgcag	gatgtctgga	gacctcagca	gcaatgtgac	tgtgtctgtg	1560
acaagcagca	ccatttctac	aaatgtggca	tccaaggctg	cctttggagg	ttctggagggt	1620
agagggtcca	gttccggagg	aggatacagc	tctggaagca	gcagttatgg	ctctggaggc	1680
cgacagtctg	gctccagagg	cggtagtggg	ggaggaggtt	ctatctctgg	aggaggatat	1740
ggctctggcg	gtggttcttg	aggaagatac	ggatctgggtg	gtggctctaa	gggagggtcc	1800
atctctggag	gaggatatgg	ctctggagggt	ggaaaacaca	gctctggagg	tggtcttaga	1860
ggaggctcca	gctctggagg	aggatatggc	tctggagggtg	gggggttctag	ctctgtaaaag	1920
ggtagctcag	gtgaagcttt	tggttccagc	gtgaccttct	cttttagata	aagatgagcc	1980
cccaccacca	ccgactctcc	caacccagac	tctccactc	cagaatgtag	aagcctgtct	2040
ctgtacctct	aactggcagc	aagttaaatt	tttgtcattt	atctctgatg	gcacttttag	2100
ggaaaagaat	gtccacatac	agtttttgaa	agatcttctc	tccaaaccag	ttagtttagag	2160
ccagtgcagc	ctctgtgttc	tggggcggaa	tctgtgtgtg	ctaggtttgt	gcttctagcc	2220
atgcccattc	ccgccccac	catgcctctt	tgcattgccc	attttccaga	tgtgtattct	2280
gttgaggacc	caggcccatc	cagggatttc	atctctaagc	ctggcagtg	tggggggaaa	2340
tgtgtttctg	tgtatatagc	tcctcttggtc	cactctgctt	tcggaagtgc	tgtggtctgg	2400
gggtcttcat	aataaacctc	atttgca				2427

<210> 385

<211> 2507

<212> DNA

<213> Homo sapiens

<400> 385
 agtcctctcc cttactctac cttgctccta cttttctcta agtcaacatg agtcgacagt 60
 ttagttccag gtctgggtac cgaagtggag ggggcttcag ctctggctct gctgggatca 120
 tcaactacca gcgcaggacc accagcagct ccacacgccg cagtggagga ggtggtggga 180
 gattttcaag ctgtggtggt ggtggtggtg gctttggtgc tgggtggtgga tttggaagtc 240
 ggagtcttgt taaccttggt ggcagtaaaa gcatctccat aagtgtggct agaggaggtg 300
 gacgtggtag tggtcttggt ggtggttatg gtggtggtgg ctttgggtggt ggtggctttg 360
 gtggtggtgg ctttgggtgga ggtggcattg ggggtggtgg ctttgggtggt tttggcagtg 420
 gtggtggtgg ttttgggtgga ggtggctttg ggggtggtgg atatgggggt ggttatggtc 480
 ctgtctgccc tcctggtggc atacaagaag tcactatcaa ccagagcctt cttcagcccc 540
 tcaatgtgga gattgacctt gagatccaaa aggtgaagtc tcgagaaaagg gagcaaatca 600
 agtcactcaa caaccaattt gcctccttca ttgacaaggt gaggttcctg gagcagcaga 660
 accagggtact gcaaacaaaa tgggagctgc tgcagcaggt agatacctcc actagaacccc 720
 ataatttaga gccctacttt gagtcattca tcaacaatct ccgaaggaga gtggaccaac 780
 tgaagagtga tcaatctcgg ttggattcgg aactgaagaa catgcaggac atggtggagg 840
 attaccggaa caagtatgag gatgaaatca acaagcggac aaatgcagag aatgaatttg 900
 tgaccatcaa gaaggatgtg gatggtgctt atatgaccaa ggtggacctt caggccaaac 960
 ttgacaactt gcagcaggaa attgatttcc ttacagcact ctaccaagca gatttgtctc 1020
 agatgcagac tcaaatcagt gaaactaatg tcactccttc tatggacaac aaccgcagtc 1080
 tcgacctgga cagcatcatt gctgaggcca agggccagta cgaggatata gccagaaga 1140
 gcaaagctga ggccgagtc ttgtaccaga gcaagtatga agagctgcag atcactgctg 1200
 gcagacatgg ggatagtgtg agaaattcaa agatagaaat ttctgagctg aatcgtgtga 1260
 tccagagact tagatctgaa atcgacaatg tcaagaagca gatctccaac ttgcagcagt 1320
 ccatcagtga tgcagagcag cgtggcgaga atgccctcaa ggatgccaa aacaagctga 1380
 atgacctgga ggatgccctg cagcaggcca aggaagacct ggcccgcctg ctgcccagct 1440
 accaggagct gatgaacacc aagctggccc tggatctgga gattgccacc tacaggacct 1500
 tcctggaggg agaagaaagc aggtatgtctg gagaatgtgc cccgaacgtg agtgtgtctg 1560
 tgagcacaa ccacaccacc atcagtggag gtggcagccg agggaggtggc ggcggtggct 1620
 acggctctgg aggtagcagc tatggctccg gaggtggtag ctatggttct ggaggtggcg 1680
 gcggcgggcg ccgtggcagc tatggctccg gaggtagcag ctacggctcc ggaggtggca 1740
 gctatggctc tggaggtggc ggccggcgcc atggcagcta cggctccgga agcagcagtg 1800
 ggggctacag aggtggctct ggaggcgggc gcggcgggcag ctctggcggc cggggctctg 1860
 gcggcgggag ctctggaggc tccataggag gccggggatc cagctctggg ggtgtcaagt 1920
 cctctggtgg cagttccagc gtgaggtttg tttctaccac ttattccgga gtaaccagat 1980
 aaagagatgc cctctgttcc attagctcta gttctcccc agcatcacta acaaatatgc 2040
 ttggcaagac cgaggtcgat ttgtcccagc cttaccggag aaaagagcta tggttagtta 2100
 cactagctca tcctattccc ccagctcttt cttttctgct gtttcccaat gaagttttca 2160
 gatcagtggt aatctcagtc ccctggctat gaccctgctt tgttctttcc ctgagaaaca 2220
 gttcagcagt gaccaccacc cacatgacat ttcaaagcac ctcttaagc cagccagagt 2280
 agaccaggt agaccaggg tgtggacagc tccttagcat cttatctctg tggtttttg 2340
 gttttgtaca taaggtgtaa gcaagttgtt tttcttttgt ggagaggtct taaactcccc 2400
 atttccttgt tttgctgcaa taaactgcat ttgaaattct ccatgtctcg atcgcccttg 2460
 tttacggctc tgtctaacct ggatgggtgt tttgtgaggt aaaagaa 2507

<210> 386

<211> 2224

<212> DNA

<213> Homo sapiens

<400> 386
 atgagcagac aagccagcaa gacatctggt ggcgggagcc aggggtttctc cgggcgctct 60
 gctgtggtct ccggcagcag caggatgagc tgtgtggccc actctggggg agctggcgga 120
 ggggcctatg gcttccggag cggagcaggt ggctttggca gtccgagcct ctacaacctg 180
 ggcggcaaca agagcatctc catcagcgtg gcagctggcg gctcccgggc tggaggtctt 240
 gggggagggc ggagcagctg tgcctttgca ggtggctatg gaggtggctt tgggagcggc 300
 tatggaggtg gctttggtgg tggctttggt ggtggcagag gaatgggagg tggtttggt 360
 ggagctggtg gctttggagg ggctgggtggc tttggagggg ctggtggctt tgggtggtct 420
 ggtggctttg gtgggtctgg tggctttggt gggcctggca gcttgggcag tcctggtggc 480
 tttgcgcctg ggggctttcc tgggggaatt cagggaagtga ctactaacca gagtctcctg 540

cagcccoctca	aagtggagac	tgacccccag	attgggcaag	taaaggccca	ggagcgggaa	600
cagatcaaga	ccctcaacaa	caagtttgcc	tccttcattg	acaagggtgcg	gttcctggag	660
caacagaaca	aagtcctgga	gaccaagtgg	aacctgctcc	agcagcaggg	cacaagttcc	720
atctcaggca	caaacaacct	tgagcctctt	tttgagaatc	acatcaacta	cctgcggagc	780
tacctggaca	acatcctcgg	ggagagaggg	cgcttgact	ctgagctgaa	gaacatggag	840
gacctggtgg	aagacttcaa	gaagaaatat	gaggatgaaa	tcaataaacg	tacagctgct	900
gagaatgaat	ttgtgactct	gaagaaggat	gtggacagtg	cctatatgaa	caagggtggag	960
cttcaggcca	aagtggatgc	cttgatagat	gagatcgact	tcttaaggac	cctctacgac	1020
gctgagctat	ctcagatgca	gagccacatc	agtacacat	ctgtggtgct	gtccatggac	1080
aataatcggt	ccctggacct	ggacagcatc	attgctgaag	ttggtgcaca	gtatgaggat	1140
atcgctcaga	gaagcaaggc	cgaagctgag	gccctgtacc	agaccaagtt	gggggagctg	1200
cagaccacgg	ctggcaggca	tggggatgac	ctaagaaata	ccaagagcga	gatcatagag	1260
ctcaacagaa	tgatccagag	gctgcgggca	gagatcgagg	gtgtcaagaa	gcagaatgcc	1320
aacctgcaga	cggccattgc	gcaggccgag	cagcatggag	agatggccct	caaggatgcc	1380
aatgccaagc	tccaagagct	gcaggctgct	ctacagcagg	cgaaggatga	cctggcgagg	1440
ctgctacgtg	actaccagga	gctgatgaat	gtcaagctgg	cctggacgt	ggagatcgcc	1500
acctaccgca	agctgctgga	gggagaggag	tacagcagga	tgtctggaga	gtgtccgagt	1560
gctgtcagca	tctccgtggt	cagcagcagc	acgacttccg	cctccgagg	tggctatgga	1620
ggagggttacg	gcggaggcat	gggaggtggt	ttaggagggtg	gcttcagtgc	gggagggcgc	1680
tcaggcattg	gctttggccg	gggagggcgc	ggtggaatcg	gcggtggatt	tggcggcggc	1740
acgagcggtt	tcagcggtgg	cagcggtctt	ggctccatct	ctggcgcccg	ctatggagtg	1800
agtggcgggg	gcttcagctc	ggccagcaac	cggggcgcca	gcataagtt	ctcccagtc	1860
tcccagtcct	cccagcgcta	ctccagataa	agagcacgca	tcagcatcgc	agccactcca	1920
gcgcctcccc	tccgctcccc	acgcccccat	attggcaaca	ccccagcgc	caccccatgc	1980
tcccaagaa	cgcggctctg	cgctggaagg	ctgtggcctc	ttgctcctcc	ttccagatcc	2040
cgggccaagc	ccagtcacga	gaatttcagg	ctctctctct	cggctccagc	ctgtgattgt	2100
ccagggtgtg	cctaggcgcc	accttctgct	gccccggagt	cccctccctg	ggtgggatgc	2160
tcactacagc	tctgatgtat	atagcacaca	gccccctccg	cccctccggt	ctgtcgccaa	2220
taaa						2224

<210> 387

<211> 2617

<212> DNA

<213> Homo sapiens

<400> 387

gacttgctcc	ggtttgacga	gctaggaggt	ggcaggctgt	gcgctcaaac	tcaggctgtc	60
taactccaca	ttctgtgggg	tgagaggatg	ggtgatgggg	tgtcttttct	ggaggaggga	120
ggtgctgtga	gcctagcgag	atggagggtac	agtgggtgtg	ggcctggagc	gctgggcca	180
ggcaggggct	tctgattagg	aagccctggg	gcaccagttc	aggttctccc	agagagtagt	240
gtgatgggat	ccagtaacct	gtgccctcca	gatgacttct	gtagggtgtg	ttagtacat	300
gctcaacggg	tgcgggaagg	atgggcttgt	gccaagggcc	aagcccagag	atgtttcaga	360
tttttccctt	tatgcccctg	caaccaagcc	ctgctgctcc	aggacatata	agagacgaag	420
gctgagggct	ccagcactca	ccggcctggg	ccctgtcact	tctctgatag	ctcccagctc	480
gctctctgca	gccatgattg	ccagacagca	gtgtgtccga	ggcggggccc	ggggcttcag	540
ctgtggctcg	gccattgtag	gcgggtggca	gagagggtgc	ttcagctcag	tctccatgtc	600
tggagggtgt	ggccgatgct	cttctggggg	atttggcagc	agaagcctct	acaacctcag	660
ggggaacaaa	agcatctcca	tgagtgtggc	tgggtcacga	caagggtgct	gctttggggg	720
tgctggaggc	tttggcactg	gtggccttgg	tgccggcggc	ttcggagctg	gtttcggcac	780
tgggtggctt	gggtgggtgg	ttgggggctc	cttcagtggg	aagggtggcc	ctggcttccc	840
cgtctgcccc	gctgggggaa	ttcaggaggt	caccatcaac	cagagcttgc	tcacccccct	900
ccacgtggag	attgacctg	agatccagaa	agtccggagc	gaagagcgcg	aacagatcaa	960
tactctcaac	aacaagtttg	cctccttcat	cgacaagggt	cagttcttag	agcaacagaa	1020
taaggctctt	gagaccaaact	ggaacctgct	ccagcagcag	acgaccacca	cctccagcaa	1080
aaaccttgag	cccctctttg	agacctacct	cagtgtcctg	aggaagcagc	tagatacctt	1140
gggcaatgac	aaagggcgcc	tgagctctga	gctgaagacc	atgcaggaca	gcgtggaggga	1200
cttcaagact	aagtatgaag	aggagatcaa	caaacgcaca	gcagccgaga	atgactttgt	1260
ggtcctaaag	aaggacgtgg	atgctgccta	cctgaacaag	gtggagtttg	aggccaaggt	1320
ggacagtctt	aatgacgaga	tcaacttctt	gaaggctctc	tatgatcgcg	agctgtccca	1380
gatgcagacc	catgtcagcg	acacgtccgt	ggtcctttcc	atggacaaca	accgcaacct	1440
ggacctggac	agcattattg	ccgagggtccg	tgcccagtag	gaggagattg	cccagaggag	1500
caaggctgag	gctgaagccc	tgtaccagac	caagggtccag	cagctccaga	tctcggttga	1560

ccaacatggt	gacaacctga	agaacaccaa	gagtgaatt	gcagagctca	acaggatgat	1620
ccagaggctg	cgggcagaga	tcgagaacat	caagaagcag	tgccagactc	ttcaggatgc	1680
cgtggctgat	gcagagcagc	gaggtgagaa	tgcccttaaa	gatgccccaca	gcaagcgctg	1740
agagctggag	gctgccctgc	agcaggccaa	ggaggagctg	gcacgaatgc	tgctgagta	1800
ccaggagctc	atgagtgtga	agctggcctt	ggacatcgag	atcgccacct	accgcaact	1860
gctggagggc	gaggagtaca	gaatgtctgg	agaatgccag	agtgccgtga	gcattctctgt	1920
ggtcagcggg	agcaccagca	ctggaggcat	cagcggagga	ttaggaagtg	gctccgggtt	1980
tggcctgagt	agtggctttg	gctccggctc	tggaaagtggc	tttgggtttg	gtggcagtgt	2040
ctctggcagt	tccagcagca	agatcatctc	taccaccacc	ctgaacaaga	gacgatagag	2100
gagacgaggt	ccctgcagct	cactgtgtcc	agctggggccc	agcactgggtg	tctctgtgct	2160
tccttcaact	cacctccatc	ctctgtctct	ggggctcatc	ttactagtat	cccctccact	2220
atcccatggg	ctctctctgc	cccaggatga	tcttctgtgc	tgggacaggg	actctgcctc	2280
ttggagtttg	gtagtactct	cttgatttgg	gcttgggtgac	ccacctggaa	tgggaaggat	2340
gtcagctgac	ctctcacctc	ccatgggagc	agaagaaaat	gaccaggagt	gtcatctcca	2400
gaattattgg	ggtcacatat	gtcccttccc	agtcacatgc	catctccac	tgatctctgt	2460
attatccatc	tacatcagaa	ccaaactact	tctccaacac	ccggcagcac	ttggccctgc	2520
aagcttagga	tgagaaccac	ttagtgctcc	attctactcc	tctcattccc	tcttatccat	2580
ctgcaggtga	atcttcaata	aatgctttt	gtcattc			2617

<210> 388

<211> 1752

<212> DNA

<213> Homo sapiens

<400> 388						
ctgctccttc	taggatctcc	gcctgggttcg	gcccgctgc	ctccactcct	gcctccacca	60
tgtccatcag	ggtgaccag	aagtcctaca	aggtgtccac	ctctggcccc	cgggccttca	120
gcagccgctc	ctacacgagt	gggcccgggt	cccgcacag	ctcctcgagc	ttctcccgag	180
tgggcagcag	caactttcgc	ggtggcctgg	gcggcggtta	tgggtggggcc	agcggcatgg	240
gaggcatcac	cgcagttacg	gtcaaccaga	gcctgtctgag	ccccttgtc	ctggaggtgg	300
accccaacat	ccaggccgtg	cgcacccagg	agaaggagca	gatcaagacc	ctcaacaaca	360
agtttgcttc	cttcatagac	aaggtacggt	tcctggagca	gcagaacaag	atgctggaga	420
ccaagtggag	cctcctgcag	cagcagaaga	cggctcgaag	caacatggac	aacatgttcg	480
agagctacat	caacaacctt	aggcggcagc	tggagactct	gggccaggag	aagctgaagc	540
tggaggcgga	gcttggcaac	atgcaggggc	tggtggagga	cttcaagaac	aagtatgagg	600
atgagatcaa	taagcgtaca	gagatggaga	acgaatttgt	cctcatcaag	aaggatgtgg	660
atgaagctta	catgaacaag	gtagagctgg	agtctcgcct	ggaagggctg	accgacgaga	720
tcaacttcct	caggcagcta	tatgaagagg	agatccggga	gctgcagtc	cagatctcgg	780
acacatctgt	ggtgctgtcc	atggacaaca	gccgtccct	ggacatggac	agcatcattg	840
ctgaggtcaa	ggcacagtac	gaggatattg	ccaaccgcag	cgggctgag	gctgagagca	900
tgtaccagat	caagtatgag	gagctgcaga	cctggctgg	gaagcacggg	gatgacctgc	960
ggcgacacaa	gactgagatc	tctgagatga	accggaacat	cagccggctc	caggctgaga	1020
ttgagggcct	caaaggccag	agggttccc	tggaggccgc	cattgcagat	gccgagcagc	1080
gtggagagct	ggccattaag	gatgccaacg	ccaagttgtc	cgagctggag	gccgccttgc	1140
agcgggccaa	gcaggacatg	gcgcggcagc	tgcgtgagta	ccaggagctg	atgaacgtca	1200
agctggccct	ggacatcgag	atcgccacct	acagggaagct	gctggagggc	gaggagagcc	1260
ggctggagtc	tgggatgcag	aacatgagta	ttcatacgaa	gaccaccagc	ggctatgcag	1320
gtggtctgag	ctcggcctat	gggggcctca	caagccccgg	cctcagctac	agcctgggct	1380
ccagcttttg	ctctggcgcg	ggctccagct	ccttcagccg	caccagctcc	tccagggccg	1440
tggttgtgaa	gaagatcgag	acacgtgatg	ggaagctggg	gtctgagtc	tctgacgtcc	1500
tgcccaagtg	aacagctcgc	gcagccccct	ccagcctacc	cctcctgcgc	tgccccagag	1560
cctgggaagg	aggccgctat	gcagggtagc	actgggaaca	ggagaccac	ctgaggctca	1620
gccctagccc	tcagcccacc	tggggagttt	actacctggg	gacccccctt	gcccatgcct	1680
ccagctacaa	aacaattcaa	ttgctttttt	tttttggctc	aaaataaaac	ctcagctagc	1740
tctgccaac	cc					1752

<210> 389

<211> 1412

<212> DNA

<213> Homo sapiens

<400> 389
 cggggctcgtc cgcaaagcct gagtccctgtc ctttctctct ccccgacag catgagcttc 60
 accactcgtc ccaccttctc caccaactac cgggtccctgg gctctgtcca ggcgcccagc 120
 tacggcgccc ggccgggtcag cagcgcgccc agcgtctatg caggcgctgg gggctctggg 180
 tcccggatct ccgtgtcccg ctccaccagc ttcaggggag gcatggggtc cgggggacctg 240
 gccaccggga tagccggggg tctggcagga atgggaggca tccagaacga gaaggagacc 300
 atgcaaagcc tgaacgaccg cctggcctct tacctggaca gaggtaggag cctggagacc 360
 gagaaccgga ggctggagag caaatccgg gagcacttgg agaagaagg accccaggte 420
 agagactgga gccattactt caagatcatc gaggacctga gggctcagat ctctcgaaat 480
 actgtggaca atgcccgcgt cgttctgcag attgacaatg cccgtcttgc tgcgtgatgac 540
 tttagagtca agtatgagac agagctggcc atgcgccagt ctgtggagaa cgacatccat 600
 gggctccgca aggtcattga tgacaccaat atcacacgac tgcagctgga gacagagatc 660
 gaggtctctca aggaggagct gctcttcatg aagaagaacc acgaagagga agtaaaaggc 720
 ctacaagccc agattgccag ctctgggttg accgtggagg tagatgcccc caaatctcag 780
 gacctcgcca agatcatggc agacatccgg gcccaatatg acgagctggc tcggaagaac 840
 cgagaggagc tagacaagta ctggctctcag cagattgagg agagcaccac agtgggtcacc 900
 acacagtctg ctgagggttg agctgctgag acgacgctca cagagctgag acgtacagtc 960
 cagtccttgg agatcgacct ggactccatg agaaatctga aggccagctt ggagaacagc 1020
 ctgaggaggg tggaggcccc ctacgcccta cagatggagc agctcaacgg gatcctgctg 1080
 caccttgagt cagagctggc acagaccggg gcagagggag agcgccaggc ccagagatat 1140
 gaggccctgc tgaacatcaa ggtcaagctg gaggctgaga tgcgcccta ccgcccgtctg 1200
 ctggaagatg gcgaggactt taatcttggg gatgccttgg acagcagcaa ctccatgcaa 1260
 accatccaaa agaccaccac ccgcccagata gtggatggca aagtgggtgc tgagaccaat 1320
 gacaccaaag ttctgaggca ttaagccagc agaagcaggg tacccttggg ggagcaggag 1380
 gccataaaaa agttcagagt tcattggatg tc 1412
 <210> 390

<211> 2516

<212> DNA

<213> Homo sapiens

<400> 390
 cggggccggc ggaccgcggg gcaggcactg cccgggctgg acgacgtctg gccggctccc 60
 ggcgaagggc agcggaggag cggcccagag cgcgcagcta gggcactggc gaaaccccg 120
 gacagtcctt ctccgtgcgg gggcgcgca gagcagctcc atccccggg tcccggcg 180
 ggctgactgc cggctgggtc cctgcgcgca gtagctcccc gagccgggct gcaccggagg 240
 cggcgagatg gtcgcgcgct tcggcctcct gctgcgcgcc ctgcagctgc tactgtgggg 300
 ccacctggac gccagcccc cggagcgcgg agggcaggag ctgcgcaagg aggcggaggc 360
 attcctagag aagtacggat acctcaatga acaggtcccc aaagctccca cctccactcg 420
 attcagcgat gccatcagag cgtttcagtg ggtgtccag ctacctgtca gcggcggtgt 480
 ggaccgcgac accctgcgcc agatgactcg tcccgcgtgc ggggttacag ataccaacag 540
 ttatgcggcc tgggctgaga ggatcagtga cttgtttgct agacaccgga ccaaatgag 600
 gcgtaagaaa cgctttgcaa agcaaggtaa caaatggtac aagcagcacc tctcctaccg 660
 cctggtgaac tggcctgagc atctgccgga gccggcagtt cggggcgccg tgcgcgccgc 720
 cttccagttg tggagcaacg tctcagcgct ggagttctgg gagccccag ccacaggccc 780
 cgctgacatc cggctcacct tcttccaagg ggaccacaac gatgggctgg gcaatgcctt 840
 tgatggcccc gggggcgccc tggcgcacgc cttcctgccc cgccgcggcg aagcgcaact 900
 cgaccaagat gagcgtggtt ccctgagccg ccgcccgggg cgcaacctgt tcgtgggtgct 960
 ggcgcacgag atcggtcaca cgcttggcct caccactcgc ccgcgccgc gcgcgctcat 1020
 ggcgccctac tacaagaggc tgggcccgga cgcgctgtct agctgggagc acgtgctggc 1080
 cgtgcagagc ctgtatggga agccccagg gggctcagtg gccgtccagc tcccaggaaa 1140
 gctgttcact gactttgaga cctgggactc ctacagcccc caaggaaggc gccctgaaac 1200
 gcagggccct aaatactgcc actcttctct cgatgccatc actgtagaca ggcaacagca 1260
 actgtacatt tttaaaggga gccatttctg ggagggtggc gctgatggca acgtctcaga 1320
 gccccgtcca ctgcaggaaa gatgggtcgg gctgcccccc aacattgagg ctgcggcagt 1380
 gtcattgaat gatggagatt tctacttctt caaagtgcaa tccgtttgat tgatatgaat 1440
 atcaaccatc gtgggctcca gcttaaggga gagcagagg ggtcagatgc ggagggtccg 1500
 gggccccaag ccagtggtgg gtctcccaca gctgtgccgg gcagggggcc tgccccgcca 1560
 tctgacgccc gccctcttct tccctctctc gcgcccctc atcctcttca aggggtgccc 1620

ctactacgtg	ctggcccag	ggggactgca	agtggagccc	tactaccccc	gaagtctgca	1680
ggactgggga	ggcatccctg	aggaggtcag	cggcgccttg	ccgaggcccg	atgggtccat	1740
catcttcttc	cgagatgacc	gctactggcg	cctcgaccag	gccaaactgc	aggcaaccac	1800
ctcgggccgc	tgggccaccg	agctgccttg	gatgggctgc	tggcatgcca	actcggggag	1860
cgccctgttc	tgaaggcacc	tcctcacctc	agaaactggg	ggtgctctca	gggcaaaatc	1920
atgttcccca	cccccggggc	agaacccttc	ttagaagcct	ctgagtccct	ctgcagaaga	1980
ccgggcagca	aagcctccat	ctggaagtct	gtctgccttt	gttccttgaa	gaatgcagca	2040
ttgtctttgt	ctgtccccc	cacatggagg	tgggggtggg	atcaatctta	ggaaaagcaa	2100
aaaagggtcc	cagatccctt	ggcccttttc	tccgaggact	tctatccctc	ccaggccttt	2160
gtttcttcgg	ctaaaggtag	agttcctttc	aagaggtaac	agcactggga	tccaagcagg	2220
gggatgaaaa	actcagcaga	gaaattcgag	accattttgc	aagactgtgc	ccttctcctc	2280
aggacccctt	ggctcagttc	ttgaaaaacg	gtgtcatatt	tagtcagagg	ccccaccccc	2340
aggaagcatg	gatggggatg	aaggcacagg	cgtctccaac	ctcagaggcc	ctttgtgggg	2400
tcaggacaca	gagtgggagg	gagactgatg	caggcctacc	agtccctggc	ttttgtcttg	2460
gggctggaat	aaagaggtgc	cttcagctgg	tgggccgaga	ggcaggaagc	agcctt	2516

<210> 391

<211> 3291

<212> DNA

<213> Homo sapiens

<400> 391

aagtcgcgac	cagagccatt	ggagggcgcg	gggactgcaa	ccctaatacag	agcccaaatg	60
gcgcagtggg	aaatgctgca	gaatcttgac	agcccttttc	aggatcagct	gcaccagctt	120
tactgcgaca	gcctcctgcc	tgtggacatt	cgacagtact	tggctgtctg	gattgaagac	180
cagaactggc	aggaagctgc	acttgggagt	gatgattcca	aggctaccat	gctattcttc	240
cacttcttgg	atcagctgaa	ctatgagtgt	ggccggttgc	gccaggaccc	agagtccttg	300
ttgctgcagc	acaatttgcg	gaaattctgc	cgggacattc	agcccttttc	ccaggatcct	360
accagtttgg	ctgagatgat	ctttaacctc	cttctggaag	aaaaaagaat	tttgcaccag	420
gctcagaggg	cccaatttga	acaaggagag	ccagttctcg	aaacacctgt	ggagagccag	480
caacatgaga	ttgaatcccg	gatcctggat	ttaagggcta	tgatggagaa	gctggtaaaa	540
tccatcagcc	aactgaaaga	ccagcaggat	gtcttctgct	tccgatataa	gatccaggcc	600
aaagggaaga	caccctctct	ggacccccat	cagaccaaag	agcagaagat	tctgcaggaa	660
actctcaatg	aactggacaa	aaggagaaag	gaggtgctgg	atgcctccaa	agcactgcta	720
ggcggattaa	ctaccctaata	cgagctactg	ctgccaaggt	tggaggagtg	gaaggcccag	780
cagcaaaaag	cctgcatacag	agctccatt	gaccacgggt	tggaacagct	ggagacatgg	840
ttcacagctg	gagcaaagct	gttgtttcac	ctgaggcagc	tgctgaagga	gctgaaggga	900
ctgagttgcc	tggtttagcta	tcaggatgac	cctctgacca	aaggggtgga	cctacgcaac	960
gcccagttct	cagagttgct	acagcgtctg	ctccacagag	cctttgtggt	agaaaccocag	1020
ccctgcattg	cccaaaactcc	ccatcgaccc	ctcatcctca	agactggcag	caagttcacc	1080
gtccgaacaa	ggctgctggg	gagactccag	gaaggcaatg	agtcactgac	tgtggaagtc	1140
tccattgaca	gggaatcctcc	tcaattacaa	ggcttccgga	agttcaacat	tctgacttca	1200
aaccagaaaa	ctttgacccc	cgagaagggg	cagagtcagg	gtttgatttg	ggactttggt	1260
tacctgactc	tgggtggagca	acgttcaggt	ggttcaggaa	agggcagcaa	taaggggcca	1320
ctaggtgtga	cagaggaact	gcacatcatc	agcttcacgg	tcaaatatac	ctaccagggt	1380
ctgaagcagg	agctgaaaac	ggacaccctc	cctgtgggtga	ttatttccaa	catgaaccag	1440
ctctcaattg	cctgggcttc	agttctctgg	ttcaatttgc	tcagcccaaa	ccttcagaac	1500
cagcagttct	tctccaacce	cccccaaggcc	ccctggagct	tgctgggccc	tgctctcagt	1560
tggcagttct	cctcctatgt	tggccgaggc	ctcaactcag	accagctgag	catgctgaga	1620
aacaagctgt	tcgggcagaa	ctgtaggact	gaggatccat	tattgtcctg	ggctgacttc	1680
actaagcgag	agagccctcc	tggcaagtta	ccatttctgga	catggctgga	caaaattctg	1740
gagttggtac	atgaccacct	gaaggatctc	tggaaatgatg	gacgcatacat	gggctttgtg	1800
agtcggagcc	aggagcgccg	gctgctgaag	aagaccatgt	ctggcacctt	tctactgctc	1860
ttcagtgaaat	cgtcagaagg	gggcattacc	tgctcctggg	tggagcacca	ggatgatgac	1920
aaggtgctca	tctactctgt	gcaaccgtac	acgaaggagg	tgctgcagtc	actcccgctg	1980
actgaaatca	tccgccatta	ccagttgtct	actgaggaga	atatacctga	aaacccactg	2040
cgcttctctc	atccccgaat	cccccgggat	gaagcttttg	ggtgctacta	ccaggagaaa	2100
gttaactctcc	aggaacggag	gaaatacctg	aaacacaggc	tcattgtggg	ctctaataga	2160
caggtggatg	aactgcaaca	accgctggag	cttaagccag	agccagagct	ggagctcatta	2220
gagctggaac	tagggctggg	gccagagcca	gagctcagcc	tggacttaga	gccactgctg	2280
aaggcagggc	tggatctggg	gccagagcta	gagtcctgtg	tggagtccac	tctggagcct	2340
gtgatagagc	ccacactatg	catggatatca	caaacagtgc	cagagccaga	ccaaggacct	2400

```

gtatcacagc cagtgccaga gccagatttg cctgtgtgatc tgagacattt gaacactgag 2460
ccaatggaaa tcttcagaaa ctgtgtaaag attgaagaaa tcatgccgaa tgggtgaccca 2520
ctggttggtg gccagaacac cgtggatgag gtttacgtct cccgccccag ccacttctac 2580
actgatggac ccttgatgcc ttctgacttc taggaaccac atttcctctg ttcttttcat 2640
atctctttgc ccttcctact cctcatagca tgatattggt ctccaaggat gggaatcagg 2700
catgtgtccc ttccaagctg tggttaactgt tcaaactcag gcctgtgtga ctccattggg 2760
gtgagagggt aaagcataac atgggtacag aggggacaac aatgaatcag aacagatgct 2820
gagccatagg tctaaatagg atcctggagg ctgcctgctg tgctgggagg tatagggggtc 2880
ctggggggcag gccaggggcag ttgacaggta cttggagggc tcaggggcagt ggcttctttc 2940
cagtatggaa ggatttcaac attttaatag ttgggttaggc taaactgggt catactggca 3000
ttggccttgg tggggagcac agacacagga taggactcca tttctttctt ccattccttc 3060
atgtctagga taacttgctt tcttctttcc tttactctg gctcaagccc tgaatttctt 3120
cttttctctg aggggttgag agctttctgc cttagcctac catgtgaaac tctaccctga 3180
agaaagggat ggataggaag tagacctctt tttcttacca gtctcctccc ctactctgcc 3240
ccctaagctg gctgtacctg ttctctcccc ataaaatgat cctgccaatc t 3291
<210> 392

```

<211> 1283

<212> DNA

<213> Homo sapiens

```

<400> 392
ctctctgctc ctctgttctg acagtcagcc gcattcttctt ttgcgtcgcc agccgagcca 60
catcgctcag acaccatggg gaagtgaaag gtcggagtca acggatttgg tcgtattggg 120
cgcttggtca ccagggtctg ttttaactct ggtaaagtgg atattgttgc catcaatgac 180
cccttcattg acctcaacta catggtttac atgttccaat atgattccac ccatggcaaa 240
ttccatggca ccgtcaaggc tgagaacggg aagcttgtca tcaatggaaa tcccatcacc 300
atcttccagg agcgagatcc ctccaaaatc aagtggggcg atgctggcgc tgagtacgtc 360
gtggagtcca ctggcgtctt caccaccatg gagaaggctg gggctcattt gcagggggga 420
gccaaaaggg tcatcatctc tgccccctct gctgatgccc ccatgttctg catgggtgtg 480
aaccatgaga agtatgacaa cagcctcaag atcatcagca atgcctcctg caccaccaac 540
tgcttagcac ccctggccaa ggtcatccat gacaactttg gtatcgtgga aggactcatg 600
accacagtcc atgccatcac tgccacccag aagactgtgg atggcccctc cgggaaactg 660
tgcggtgatg gccgcggggc tctccagaac atcatccctg cctctactgg cgctgccaaag 720
gctgtgggca aggtcatccc tgagctgaac gggaagctca ctggcatggc cttccgtgtc 780
cccactgcca acgtgtcagt ggtggacctg acctgccgtc tagaaaaacc tgccaaatat 840
gatgacatca agaaggtggg gaagcaggcg tcggaggggc ccctcaaggg catcctgggc 900
tacactgagc accaggtggg ctctcttgac ttcaacagcg acacccactc ctccaccttt 960
gacgctgggg ctggcattgc cctcaacgac cactttgtca agctcatttc ctgggatgac 1020
aacgaatttg gctacagcaa cagggtgggt gacctcatgg ccacatggc ctccaaggag 1080
taagaccctt ggaccaccag cccagcaag agcacaagag gaagagagag acctcactg 1140
ctggggagtc cctgccacac tcagtcccc accacactga atctcccctc ctcacagtgt 1200
ccatgtagac cccttgaaga ggggaggggc ctaggagacc gcaccttgtc atgtaccatc 1260
aataaagtac cctgtgctca acc 1283
<210> 393

```

<211> 331

<212> PRT

<213> Homo sapiens

```

<400> 393
Met Gly Gly Ser Ala Gly Arg Glu Leu Asp Ala Gly Arg Lys Pro Lys
1          5          10          15
Leu Thr Arg Thr Gln Ser Ala Phe Ser Pro Val Ser Phe Ser Pro Leu
20          25          30
Phe Thr Gly Glu Thr Val Ser Leu Val Asp Val Asp Ile Ser Gln Arg
35          40          45

```

Gly Leu Thr Ser Pro His Pro Pro Thr Pro Pro Pro Pro Pro Arg Arg
 50 55 60
 Ser Leu Ser Leu Leu Asp Asp Ile Ser Gly Thr Leu Pro Thr Ser Val
 65 70 75 80
 Leu Val Ala Pro Met Gly Ser Ser Leu Gln Ser Phe Pro Leu Pro Pro
 85 90 95
 Pro Pro Pro Pro His Ala Pro Asp Ala Phe Pro Arg Ile Ala Pro Ile
 100 105 110
 Arg Ala Ala Glu Ser Leu His Ser Gln Pro Pro Gln His Leu Gln Cys
 115 120 125
 Pro Leu Tyr Arg Pro Asp Ser Ser Ser Phe Ala Ala Ser Leu Arg Glu
 130 135 140
 Leu Glu Lys Cys Gly Trp Tyr Trp Gly Pro Met Asn Trp Glu Asp Ala
 145 150 155 160
 Glu Met Lys Leu Lys Gly Lys Pro Asp Gly Ser Phe Leu Val Arg Asp
 165 170 175
 Ser Ser Asp Pro Arg Tyr Ile Leu Ser Leu Ser Phe Arg Ser Gln Gly
 180 185 190
 Ile Thr His His Thr Arg Met Glu His Tyr Arg Gly Thr Phe Ser Leu
 195 200 205
 Trp Cys His Pro Lys Phe Glu Asp Arg Cys Gln Ser Val Val Glu Phe
 210 215 220
 Ile Lys Arg Ala Ile Met His Ser Lys Asn Gly Lys Phe Leu Tyr Phe
 225 230 235 240
 Leu Arg Ser Arg Val Pro Gly Leu Pro Pro Thr Pro Val Gln Leu Leu
 245 250 255
 Tyr Pro Val Ser Arg Phe Ser Asn Val Lys Ser Leu Gln His Leu Cys
 260 265 270
 Arg Phe Arg Ile Arg Gln Leu Val Arg Ile Asp His Ile Pro Asp Leu
 275 280 285
 Pro Leu Pro Lys Pro Leu Ile Ser Tyr Ile Arg Lys Phe Tyr Tyr Tyr
 290 295 300
 Asp Pro Gln Glu Glu Val Tyr Leu Ser Leu Lys Glu Ala Gln Leu Ile
 305 310 315 320
 Ser Lys Gln Lys Gln Glu Val Glu Pro Ser Thr
 325 330

<210> 394

<211> 306

<212> PRT

<213> Homo sapiens

<400> 394

Met Ala Ala Pro Ile Pro Gln Gly Phe Ser Cys Leu Ser Arg Val Leu
 1 5 10 15
 Gly Trp Trp Ser Arg Gln Pro Val Leu Val Thr Gln Ser Ala Ala Ile
 20 25 30
 Val Pro Val Arg Thr Lys Lys Arg Phe Thr Pro Pro Ile Tyr Gln Pro
 35 40 45
 Lys Phe Lys Thr Glu Lys Glu Phe Met Gln His Ala Arg Lys Ala Gly
 50 55 60
 Leu Val Ile Pro Pro Glu Lys Ser Asp Arg Ser Ile His Leu Ala Cys
 65 70 75 80
 Thr Ala Gly Ile Phe Asp Ala Tyr Val Pro Pro Glu Gly Asp Ala Arg
 85 90 95
 Ile Ser Ser Leu Ser Lys Glu Gly Leu Ile Glu Arg Thr Glu Arg Met
 100 105 110
 Lys Lys Thr Met Ala Ser Gln Val Ser Ile Arg Arg Ile Lys Asp Tyr
 115 120 125
 Asp Ala Asn Phe Lys Ile Lys Asp Phe Pro Glu Lys Ala Lys Asp Ile
 130 135 140

Phe Ile Glu Ala His Leu Cys Leu Asn Asn Ser Asp His Asp Arg Leu
 145 150 155 160
 His Thr Leu Val Thr Glu His Cys Phe Pro Asp Met Thr Trp Asp Ile
 165 170 175
 Lys Tyr Lys Thr Val Arg Trp Ser Phe Val Glu Ser Leu Glu Pro Ser
 180 185 190
 His Val Val Gln Val Arg Cys Ser Ser Met Met Asn Gln Gly Asn Val
 195 200 205
 Tyr Gly Gln Ile Thr Val Arg Met His Thr Arg Gln Thr Leu Ala Ile
 210 215 220
 Tyr Asp Arg Phe Gly Arg Leu Met Tyr Gly Gln Glu Asp Val Pro Lys
 225 230 235 240
 Asp Val Leu Glu Tyr Val Val Phe Glu Lys Gln Leu Thr Asn Pro Tyr
 245 250 255
 Gly Ser Trp Arg Met His Thr Lys Ile Val Pro Pro Trp Ala Pro Pro
 260 265 270
 Lys Gln Pro Ile Leu Lys Thr Val Met Ile Pro Gly Pro Gln Leu Lys
 275 280 285
 Pro Glu Glu Glu Tyr Glu Glu Ala Gln Gly Glu Ala Gln Lys Pro Gln
 290 295 300
 Leu Ala
 305

<210> 395

<211> 557

<212> PRT

<213> Homo sapiens

<400> 395

Met Val Ser Lys Leu Thr Ser Leu Gln Gln Glu Leu Leu Ser Ala Leu
 1 5 10 15
 Leu Ser Ser Gly Val Thr Lys Glu Val Leu Val Gln Ala Leu Glu Glu
 20 25 30
 Leu Leu Pro Ser Pro Asn Phe Gly Val Lys Leu Glu Thr Leu Pro Leu
 35 40 45
 Ser Pro Gly Ser Gly Ala Glu Pro Asp Thr Lys Pro Val Phe His Thr
 50 55 60
 Leu Thr Asn Gly His Ala Lys Gly Arg Leu Ser Gly Asp Glu Gly Ser
 65 70 75 80
 Glu Asp Gly Asp Asp Tyr Asp Thr Pro Pro Ile Leu Lys Glu Leu Gln
 85 90 95
 Ala Leu Asn Thr Glu Glu Ala Ala Glu Gln Arg Ala Glu Val Asp Arg
 100 105 110
 Met Leu Ser Glu Asp Pro Trp Arg Ala Ala Lys Met Ile Lys Gly Tyr
 115 120 125
 Met Gln Gln His Asn Ile Pro Gln Arg Glu Val Val Asp Val Thr Gly
 130 135 140
 Leu Asn Gln Ser His Leu Ser Gln His Leu Asn Lys Gly Thr Pro Met
 145 150 155 160
 Lys Thr Gln Lys Arg Ala Ala Leu Tyr Thr Trp Tyr Val Arg Lys Gln
 165 170 175
 Arg Glu Ile Leu Arg Gln Phe Asn Gln Thr Val Gln Ser Ser Gly Asn
 180 185 190
 Met Thr Asp Lys Ser Ser Gln Asp Gln Leu Leu Phe Leu Phe Pro Glu
 195 200 205
 Phe Ser Gln Gln Ser His Gly Pro Gly Gln Ser Asp Asp Ala Cys Ser
 210 215 220
 Glu Pro Thr Asn Lys Lys Met Arg Arg Asn Arg Phe Lys Trp Gly Pro
 225 230 235 240
 Ala Ser Gln Gln Ile Leu Tyr Gln Ala Tyr Asp Arg Gln Lys Asn Pro
 245 250 255

Ser Lys Glu Glu Arg Glu Ala Leu Val Glu Glu Cys Asn Arg Ala Glu
 260 265 270
 Cys Leu Gln Arg Gly Val Ser Pro Ser Lys Ala His Gly Leu Gly Ser
 275 280 285
 Asn Leu Val Thr Glu Val Arg Val Tyr Asn Trp Phe Ala Asn Arg Arg
 290 295 300
 Lys Glu Glu Ala Phe Arg Gln Lys Leu Ala Met Asp Ala Tyr Ser Ser
 305 310 315 320
 Asn Gln Thr His Ser Leu Asn Pro Leu Leu Ser His Gly Ser Pro His
 325 330 335
 His Gln Pro Ser Ser Pro Pro Asn Lys Leu Ser Gly Val Arg Tyr
 340 345 350
 Ser Gln Gln Gly Asn Asn Glu Ile Thr Ser Ser Ser Thr Ile Ser His
 355 360 365
 His Gly Asn Ser Ala Met Val Thr Ser Gln Ser Val Leu Gln Gln Val
 370 375 380
 Ser Pro Ala Ser Leu Asp Pro Gly His Asn Leu Leu Ser Pro Asp Gly
 385 390 395 400
 Lys Met Ile Ser Val Ser Gly Gly Gly Leu Pro Pro Val Ser Thr Leu
 405 410 415
 Thr Asn Ile His Ser Leu Ser His His Asn Pro Gln Gln Ser Gln Asn
 420 425 430
 Leu Ile Met Thr Pro Leu Ser Gly Val Met Ala Ile Ala Gln Ser Leu
 435 440 445
 Asn Thr Ser Gln Ala Gln Ser Val Pro Val Ile Asn Ser Val Ala Gly
 450 455 460
 Ser Leu Ala Ala Leu Gln Pro Val Gln Phe Ser Gln Gln Leu His Ser
 465 470 475 480
 Pro His Gln Gln Pro Leu Met Gln Gln Ser Pro Gly Ser His Met Ala
 485 490 495
 Gln Gln Pro Phe Met Ala Ala Val Thr Gln Leu Gln Asn Ser His Met
 500 505 510
 Tyr Ala His Lys Gln Glu Pro Pro Gln Tyr Ser His Thr Ser Arg Phe
 515 520 525
 Pro Ser Ala Met Val Val Thr Asp Thr Ser Ser Ile Ser Thr Leu Thr
 530 535 540
 Asn Met Ser Ser Ser Lys Gln Cys Pro Leu Gln Ala Trp
 545 550 555

<210> 396

<211> 491

<212> PRT

<213> Homo sapiens

<400> 396

Met Ser Ser Val Glu Ala Lys Ile Glu Asp Lys Lys Val Gln Arg Glu
 1 5 10 15
 Ser Lys Leu Thr Ser Gly Lys Leu Glu Asn Leu Arg Lys Glu Lys Ile
 20 25 30
 Asn Phe Leu Arg Asn Lys His Lys Ile His Val Gln Gly Thr Asp Leu
 35 40 45
 Pro Asp Pro Ile Ala Thr Phe Gln Gln Leu Asp Gln Glu Tyr Lys Ile
 50 55 60
 Asn Ser Arg Leu Leu Gln Asn Ile Leu Asp Ala Gly Phe Gln Met Pro
 65 70 75 80
 Thr Pro Ile Gln Met Gln Ala Ile Pro Val Met Leu His Gly Arg Glu
 85 90 95
 Leu Leu Ala Ser Ala Pro Thr Gly Ser Gly Lys Thr Leu Ala Phe Ser
 100 105 110
 Ile Pro Ile Leu Met Gln Leu Lys Gln Pro Ala Asn Lys Gly Phe Arg
 115 120 125

Ala Leu Ile Ile Ser Pro Thr Arg Glu Leu Ala Ser Gln Ile His Arg
 130 135 140
 Glu Leu Ile Lys Ile Ser Glu Gly Thr Gly Phe Arg Ile His Met Ile
 145 150 155 160
 His Lys Ala Ala Val Ala Ala Lys Lys Phe Gly Pro Lys Ser Ser Lys
 165 170 175
 Lys Phe Asp Ile Leu Val Thr Thr Pro Asn Arg Leu Ile Tyr Leu Leu
 180 185 190
 Lys Gln Asp Pro Pro Gly Ile Asp Leu Ala Ser Val Glu Trp Leu Val
 195 200 205
 Val Asp Glu Ser Asp Lys Leu Phe Glu Asp Gly Lys Thr Gly Phe Arg
 210 215 220
 Asp Gln Leu Ala Ser Ile Phe Leu Ala Cys Thr Ser His Lys Val Arg
 225 230 235 240
 Arg Ala Met Phe Ser Ala Thr Phe Ala Tyr Asp Val Glu Gln Trp Cys
 245 250 255
 Lys Leu Asn Leu Asp Asn Val Ile Ser Val Ser Ile Gly Ala Arg Asn
 260 265 270
 Ser Ala Val Glu Thr Val Glu Gln Glu Leu Leu Phe Val Gly Ser Glu
 275 280 285
 Thr Gly Lys Leu Leu Ala Val Arg Glu Leu Val Lys Lys Gly Phe Asn
 290 295 300
 Pro Pro Val Leu Val Phe Val Gln Ser Ile Glu Arg Ala Lys Glu Leu
 305 310 315 320
 Phe His Glu Leu Ile Tyr Glu Gly Ile Asn Val Asp Val Ile His Ala
 325 330 335
 Glu Arg Thr Gln Gln Gln Arg Asp Asn Thr Val His Ser Phe Arg Ala
 340 345 350
 Gly Lys Ile Trp Val Leu Ile Cys Thr Ala Leu Leu Ala Arg Gly Ile
 355 360 365
 Asp Phe Lys Gly Val Asn Leu Val Ile Asn Tyr Asp Phe Pro Thr Ser
 370 375 380
 Ser Val Glu Tyr Ile His Arg Ile Gly Arg Thr Gly Arg Ala Gly Asn
 385 390 395 400
 Lys Gly Lys Ala Ile Thr Phe Phe Thr Glu Asp Asp Lys Pro Leu Leu
 405 410 415
 Arg Ser Val Ala Asn Val Ile Gln Gln Ala Gly Cys Pro Val Pro Glu
 420 425 430
 Tyr Ile Lys Gly Phe Gln Lys Leu Leu Ser Lys Gln Lys Lys Lys Met
 435 440 445
 Ile Lys Lys Pro Leu Glu Arg Glu Ser Ile Ser Thr Thr Pro Lys Cys
 450 455 460
 Phe Leu Glu Lys Ala Lys Asp Lys Gln Arg Lys Val Thr Gly Gln Asn
 465 470 475 480
 Ser Lys Lys Lys Val Ala Leu Glu Asp Lys Ser
 485 490

<210> 397

<211> 424

<212> PRT

<213> Homo sapiens

<400> 397

Met Asp Phe Ser Arg Arg Ser Phe His Arg Ser Leu Ser Ser Ser Leu
 1 5 10 15
 Gln Ala Pro Val Val Ser Thr Val Gly Met Gln Arg Leu Gly Thr Thr
 20 25 30
 Pro Ser Val Tyr Gly Gly Ala Gly Gly Arg Gly Ile Arg Ile Ser Asn
 35 40 45
 Ser Arg His Thr Val Asn Tyr Gly Ser Asp Leu Thr Gly Gly Gly Asp
 50 55 60

Leu Phe Val Gly Asn Glu Lys Met Ala Met Gln Asn Leu Asn Asp Arg
 65 70 75 80
 Leu Ala Ser Tyr Leu Glu Lys Val Arg Thr Leu Glu Gln Ser Asn Ser
 85 90 95
 Lys Leu Glu Val Gln Ile Lys Gln Trp Tyr Glu Thr Asn Ala Pro Arg
 100 105 110
 Ala Gly Arg Asp Tyr Ser Ala Tyr Arg Gln Ile Glu Glu Leu Arg
 115 120 125
 Ser Gln Ile Lys Asp Ala Gln Leu Gln Asn Ala Arg Cys Val Leu Gln
 130 135 140
 Ile Asp Asn Ala Lys Leu Ala Ala Glu Asp Phe Arg Leu Lys Tyr Glu
 145 150 155 160
 Thr Glu Arg Gly Ile Arg Leu Thr Val Glu Ala Asp Leu Gln Gly Leu
 165 170 175
 Asn Lys Val Phe Asp Asp Leu Thr Leu His Lys Thr Asp Leu Glu Ile
 180 185 190
 Gln Ile Glu Glu Leu Asn Lys Asp Leu Ala Leu Leu Lys Lys Glu His
 195 200 205
 Gln Glu Glu Val Asp Gly Leu His Lys His Leu Gly Asn Thr Val Asn
 210 215 220
 Val Glu Val Asp Ala Ala Pro Gly Leu Asn Leu Gly Val Ile Met Asn
 225 230 235 240
 Glu Met Arg Gln Lys Tyr Glu Val Met Ala Gln Lys Asn Leu Gln Glu
 245 250 255
 Ala Lys Glu Gln Phe Glu Arg Gln Thr Ala Val Leu Gln Gln Gln Val
 260 265 270
 Thr Val Asn Thr Glu Glu Leu Lys Gly Thr Glu Val Gln Leu Thr Glu
 275 280 285
 Leu Arg Arg Thr Ser Gln Ser Leu Glu Ile Glu Leu Gln Ser His Leu
 290 295 300
 Ser Met Lys Glu Ser Leu Glu His Thr Leu Glu Glu Thr Lys Ala Arg
 305 310 315 320
 Tyr Ser Ser Gln Leu Ala Asn Leu Gln Ser Leu Leu Ser Ser Leu Glu
 325 330 335
 Ala Gln Leu Met Gln Ile Arg Ser Asn Met Glu Arg Gln Asn Asn Glu
 340 345 350
 Tyr His Ile Leu Leu Asp Ile Lys Thr Arg Leu Glu Gln Glu Ile Ala
 355 360 365
 Thr Tyr Arg Arg Leu Leu Glu Gly Glu Asp Val Lys Thr Thr Glu Tyr
 370 375 380
 Gln Leu Ser Thr Leu Glu Glu Arg Asp Ile Lys Lys Thr Arg Lys Ile
 385 390 395 400
 Lys Thr Val Val Gln Glu Val Val Asp Gly Lys Val Val Ser Ser Glu
 405 410 415
 Val Lys Glu Val Glu Glu Asn Ile
 420

<210> 398

<211> 209

<212> PRT

<213> Homo sapiens

<400> 398

Met Glu Lys His His Val Pro Ser Asp Phe Asn Val Asn Val Lys Val
 1 5 10 15
 Asp Thr Gly Pro Arg Glu Asp Leu Ile Lys Val Leu Glu Asp Met Arg
 20 25 30
 Gln Glu Tyr Glu Leu Ile Ile Lys Lys His Arg Asp Leu Asp Thr
 35 40 45
 Trp Tyr Lys Glu Gln Ser Ala Ala Met Ser Gln Glu Ala Ala Ser Pro
 50 55 60

Ala Thr Val Gln Ser Arg Gln Gly Asp Ile His Glu Leu Lys Arg Thr
65 70 75 80
Phe Gln Ala Leu Glu Ile Asp Leu Gln Thr Gln Tyr Ser Thr Lys Ser
85 90 95
Ala Leu Glu Asn Met Leu Ser Glu Thr Gln Ser Arg Tyr Ser Cys Lys
100 105 110
Leu Gln Asp Met Gln Glu Ile Ile Ser His Tyr Glu Glu Leu Thr
115 120 125
Gln Leu Arg His Glu Leu Glu Arg Gln Asn Asn Glu Tyr Gln Val Leu
130 135 140
Leu Gly Ile Lys Thr His Leu Glu Lys Glu Ile Thr Thr Tyr Arg Arg
145 150 155 160
Leu Leu Glu Gly Glu Ser Glu Gly Thr Arg Glu Glu Ser Lys Ser Ser
165 170 175
Met Lys Val Ser Ala Thr Pro Lys Ile Lys Ala Ile Thr Gln Glu Thr
180 185 190
Ile Asn Gly Arg Leu Val Leu Cys Gln Val Asn Glu Ile Gln Lys His
195 200 205
Ala

<210> 399

<211> 98

<212> PRT

<213> Homo sapiens

<400> 399

Met Asp Cys Cys Ala Ser Arg Gly Cys Ser Val Pro Thr Gly Pro Ala
1 5 10 15
Thr Thr Ile Cys Ser Ser Asp Lys Ser Cys Arg Cys Gly Val Cys Leu
20 25 30
Pro Ser Thr Cys Pro His Thr Val Trp Leu Leu Glu Pro Thr Cys Cys
35 40 45
Asp Asn Cys Pro Pro Pro Cys His Ile Pro Gln Pro Cys Val Pro Thr
50 55 60
Cys Phe Leu Leu Asn Ser Cys Gln Pro Thr Pro Gly Leu Glu Thr Leu
65 70 75 80
Asn Leu Thr Thr Phe Thr Gln Pro Cys Cys Glu Pro Cys Leu Pro Arg
85 90 95
Gly Cys

<210> 400

<211> 98

<212> PRT

<213> Homo sapiens

<400> 400

Met Asp Cys Cys Ala Ser Arg Ser Cys Ser Val Pro Thr Gly Pro Ala
1 5 10 15
Thr Thr Ile Cys Ser Ser Asp Lys Ser Cys Arg Cys Gly Val Cys Leu
20 25 30
Pro Ser Thr Cys Pro His Thr Val Trp Leu Leu Glu Pro Ile Cys Cys
35 40 45
Asp Asn Cys Pro Pro Pro Cys His Ile Pro Gln Pro Cys Val Pro Thr
50 55 60
Cys Phe Leu Leu Asn Ser Cys Gln Pro Thr Pro Gly Leu Glu Thr Leu
65 70 75 80

Asn Leu Thr Thr Phe Thr Gln Pro Cys Cys Glu Pro Cys Leu Pro Arg
 85 90 95
 Gly Cys

<210> 401

<211> 79

<212> PRT

<213> Homo sapiens

<400> 401

Met Ser Cys Cys Asp Ser Tyr Leu Gln Gly Cys Cys Ser Val Pro Thr
 1 5 10 15
 Gly Leu Ala Thr Thr Ile Cys Pro Ser Asp Ile Ser Cys Gln Cys Glu
 20 25 30
 Val Cys Leu Pro Ser Thr Cys Pro His Glu Ile Ser Leu Leu Gln Pro
 35 40 45
 Thr Cys Cys Glu Pro Gly Pro Cys Leu Ala Ala Cys Leu Thr Pro Met
 50 55 60
 Cys His Pro Val Asp Cys Ser Thr Asn Ala Thr Gln Leu Gln Pro
 65 70 75

<210> 402

<211> 98

<212> PRT

<213> Homo sapiens

<400> 402

Met Tyr Cys Cys Ala Leu Arg Ser Cys Ser Val Pro Thr Gly Pro Ala
 1 5 10 15
 Thr Thr Phe Cys Ser Phe Asp Lys Ser Cys Arg Cys Gly Val Cys Leu
 20 25 30
 Pro Ser Thr Cys Pro His Glu Ile Ser Leu Leu Gln Pro Ile Cys Cys
 35 40 45
 Asp Thr Cys Pro Pro Pro Cys Cys Lys Pro Asp Thr Tyr Val Pro Thr
 50 55 60
 Cys Trp Leu Leu Asn Asn Cys His Pro Thr Pro Gly Leu Ser Gly Ile
 65 70 75 80
 Asn Leu Thr Thr Tyr Val Gln Pro Gly Cys Glu Ser Pro Cys Glu Pro
 85 90 95

Arg Cys

<210> 403

<211> 174

<212> PRT

<213> Homo sapiens

<400> 403

Met Thr Cys Cys Gln Thr Ser Phe Cys Gly Tyr Pro Ser Phe Ser Ile
 1 5 10 15
 Ser Gly Thr Cys Gly Ser Ser Cys Cys Gln Pro Ser Cys Cys Glu Thr
 20 25 30

```

Ser Cys Cys Gln Pro Arg Ser Cys Gln Thr Ser Phe Cys Gly Phe Pro
      35      40      45
Ser Phe Ser Thr Ser Gly Thr Cys Ser Ser Ser Cys Cys Gln Pro Ser
      50      55      60
Cys Cys Glu Thr Ser Cys Cys Gln Pro Ser Cys Cys Glu Thr Ser Cys
      65      70      75      80
Cys Gln Pro Ser Cys Cys Gln Ile Ser Ser Cys Gly Thr Gly Cys Gly
      85      90      95
Ile Gly Gly Gly Ile Ser Tyr Gly Gln Glu Gly Ser Ser Gly Ala Val
      100      105      110
Ser Thr Arg Ile Arg Trp Cys Arg Pro Asp Ser Arg Val Glu Gly Thr
      115      120      125
Tyr Leu Pro Pro Cys Cys Val Val Ser Cys Thr Pro Pro Ser Cys Cys
      130      135      140
Gln Leu His His Ala Gln Ala Ser Cys Cys Arg Pro Ser Tyr Cys Gly
      145      150      155      160
Gln Ser Cys Cys Arg Pro Val Cys Cys Cys Glu Pro Thr Cys
      165      170

```

<210> 404

<211> 167

<212> PRT

<213> Homo sapiens

<400> 404

```

Met Thr Cys Cys Gln Thr Ser Phe Cys Gly Tyr Pro Ser Cys Ser Thr
1      5      10      15
Ser Gly Thr Cys Gly Ser Ser Cys Cys Gln Pro Ser Cys Cys Glu Thr
      20      25      30
Ser Cys Cys Gln Pro Ser Cys Cys Gln Thr Ser Phe Cys Gly Phe Pro
      35      40      45
Ser Phe Ser Thr Ser Gly Thr Cys Ser Ser Ser Cys Cys Gln Pro Ser
      50      55      60
Cys Cys Glu Thr Ser Cys Cys Gln Pro Ser Cys Cys Gln Thr Ser Ser
      65      70      75      80
Cys Gly Thr Gly Cys Gly Ile Gly Gly Gly Ile Gly Tyr Gly Gln Glu
      85      90      95
Gly Ser Ser Gly Ala Val Ser Thr Arg Ile Arg Trp Cys Arg Pro Asp
      100      105      110
Cys Arg Val Glu Gly Thr Cys Leu Pro Pro Cys Cys Val Val Ser Cys
      115      120      125
Thr Pro Pro Thr Cys Cys Gln Leu His His Ala Glu Ala Ser Cys Cys
      130      135      140
Arg Pro Ser Tyr Cys Gly Gln Ser Cys Cys Arg Pro Val Cys Cys Cys
      145      150      155      160
Tyr Ser Cys Glu Pro Thr Cys
      165

```

<210> 405

<211> 177

<212> PRT

<213> Homo sapiens

<400> 405

```

Met Ala Cys Cys Gln Thr Ser Phe Cys Gly Phe Pro Ser Cys Ser Thr
1      5      10      15
Ser Gly Thr Cys Gly Ser Ser Cys Cys Gln Pro Ser Cys Cys Glu Thr
      20      25      30

```

Ser Ser Cys Gln Pro Arg Cys Cys Glu Thr Ser Cys Cys Gln Pro Ser
 35 40 45
 Cys Cys Gln Thr Ser Phe Cys Gly Phe Pro Ser Phe Ser Thr Gly Gly
 50 55 60
 Thr Cys Asp Ser Ser Cys Cys Gln Pro Ser Cys Cys Glu Thr Ser Cys
 65 70 75 80
 Cys Gln Pro Ser Cys Tyr Gln Thr Ser Ser Cys Gly Thr Gly Cys Gly
 85 90 95
 Ile Gly Gly Gly Ile Gly Tyr Gly Gln Glu Gly Ser Ser Gly Ala Val
 100 105 110
 Ser Thr Arg Ile Arg Trp Cys Arg Pro Asp Cys Arg Val Glu Gly Thr
 115 120 125
 Cys Leu Pro Pro Cys Cys Val Val Ser Cys Thr Pro Pro Ser Cys Cys
 130 135 140
 Gln Leu His His Ala Glu Ala Ser Cys Cys Arg Pro Ser Tyr Cys Gly
 145 150 155 160
 Gln Ser Cys Cys Arg Pro Val Cys Cys Cys Tyr Cys Ser Glu Pro Thr
 165 170 175
 Cys

<210> 406

<211> 85

<212> PRT

<213> Homo sapiens

<400> 406

Val Thr Cys Val Pro Arg Cys Thr Arg Pro Ile Cys Glu Pro Cys Arg
 1 5 10 15
 Arg Pro Val Cys Cys Asp Pro Cys Ser Leu Gln Glu Gly Cys Cys Arg
 20 25 30
 Pro Ile Thr Cys Cys Pro Ser Ser Cys Thr Ala Val Val Cys Arg Pro
 35 40 45
 Cys Cys Trp Ala Thr Thr Cys Cys Gln Pro Val Ser Val Gln Ser Pro
 50 55 60
 Cys Cys Arg Pro Pro Cys Gly Gln Pro Thr Pro Cys Ser Thr Thr Cys
 65 70 75 80
 Arg Thr Ser Ser Cys
 85

<210> 407

<211> 128

<212> PRT

<213> Homo sapiens

<400> 407

Met Thr Gly Ser Cys Cys Gly Ser Thr Leu Ser Ser Leu Ser Tyr Gly
 1 5 10 15
 Gly Gly Cys Cys Gln Pro Cys Cys Cys Arg Asp Pro Cys Cys Cys Arg
 20 25 30
 Pro Val Thr Cys Gln Thr Thr Val Cys Arg Pro Val Thr Cys Val Pro
 35 40 45
 Arg Cys Thr Arg Pro Ile Cys Glu Pro Cys Arg Arg Pro Val Cys Cys
 50 55 60
 Asp Pro Cys Ser Leu Gln Glu Gly Cys Cys Arg Pro Ile Thr Cys Cys
 65 70 75 80
 Pro Ser Ser Cys Thr Ala Val Val Cys Arg Pro Cys Cys Trp Ala Thr
 85 90 95

- 221 -

Thr Cys Cys Gln Pro Val Ser Val Gln Ser Pro Cys Cys Arg Pro Pro
 100 105 110
 Cys Gly Gln Pro Thr Pro Cys Ser Thr Thr Cys Arg Thr Ser Ser Cys
 115 120 125

<210> 408

<211> 20

<212> PRT

<213> Homo sapiens

<400> 408

Met Glu Thr His Cys Thr Gly Arg Ser Ala Ser Phe Cys Ser Ser Ser
 1 5 10 15
 Ala Ile Leu Ile
 20

<210> 409

<211> 210

<212> PRT

<213> Homo sapiens

<400> 409

Met Val Ser Ser Cys Cys Gly Ser Val Cys Ser Asp Gln Gly Cys Gly
 1 5 10 15
 Gln Val Leu Cys Gln Glu Thr Cys Cys Arg Pro Ser Cys Cys Gln Thr
 20 25 30
 Thr Cys Cys Arg Thr Thr Cys Tyr Arg Pro Ser Cys Cys Val Ser Ser
 35 40 45
 Cys Cys Arg Pro Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys
 50 55 60
 Cys Arg Pro Ser Cys Cys Glu Thr Thr Cys Cys His Pro Arg Cys Cys
 65 70 75 80
 Ile Ser Ser Cys Cys Arg Pro Ser Cys Cys Met Ser Ser Cys Cys Lys
 85 90 95
 Pro Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys Cys Arg Pro
 100 105 110
 Ser Cys Cys Ile Ser Ser Cys Cys Arg Pro Ser Cys Cys Val Ser Arg
 115 120 125
 Cys Cys Arg Pro Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys
 130 135 140
 Cys Arg Pro Ser Cys Cys Ile Ser Ser Cys Cys Arg Pro Ser Cys Cys
 145 150 155 160
 Glu Ser Ser Cys Cys Arg Pro Cys Cys Cys Arg Pro Cys Cys Cys Leu
 165 170 175
 Arg Pro Val Cys Gly Arg Val Ser Cys His Thr Thr Cys Tyr Arg Pro
 180 185 190
 Thr Cys Val Ile Ser Thr Cys Pro Arg Pro Leu Cys Cys Ala Ser Ser
 195 200 205
 Cys Cys
 210

<210> 410

<211> 195

<212> PRT

<213> Homo sapiens

<400> 410
 Met Val Asn Ser Cys Cys Gly Ser Val Cys Ser His Gln Gly Cys Gly
 1 5 10 15
 Gln Asp Leu Cys Gln Glu Thr Cys Cys Arg Pro Ser Cys Cys Glu Thr
 20 25 30
 Thr Cys Cys Arg Thr Thr Tyr Cys Arg Pro Ser Cys Cys Val Ser Ser
 35 40 45
 Cys Cys Arg Pro Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys
 50 55 60
 Cys Arg Pro Arg Cys Cys Ile Ser Ser Cys Cys Arg Pro Ser Cys Cys
 65 70 75 80
 Val Ser Ser Cys Cys Lys Pro Gln Cys Cys Gln Ser Met Cys Cys Gln
 85 90 95
 Pro Thr Cys Cys Arg Pro Arg Cys Cys Ile Ser Ser Cys Cys Arg Pro
 100 105 110
 Ser Cys Cys Val Ser Ser Cys Cys Arg Pro Gln Cys Cys Gln Ser Val
 115 120 125
 Cys Cys Gln Pro Thr Cys Cys His Pro Ser Cys Ser Ile Ser Ser Cys
 130 135 140
 Cys Arg Pro Ser Cys Cys Glu Ser Ser Cys Cys Arg Pro Cys Cys Cys
 145 150 155 160
 Leu Arg Pro Val Cys Gly Gly Val Ser Cys His Thr Thr Cys Tyr Arg
 165 170 175
 Pro Thr Cys Val Ile Ser Ser Cys Pro Arg Pro Leu Cys Cys Ala Ser
 180 185 190
 Ser Cys Cys
 195
 <210> 411
 <211> 201
 <212> PRT
 <213> Homo sapiens

<400> 411
 Met Val Asn Ser Cys Cys Gly Ser Val Cys Ser Asp Gln Gly Cys Gly
 1 5 10 15
 Leu Glu Asn Cys Cys Arg Pro Ser Cys Cys Gln Thr Thr Cys Cys Arg
 20 25 30
 Thr Thr Cys Cys Arg Pro Ser Cys Cys Val Ser Ser Cys Cys Arg Pro
 35 40 45
 Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys Cys Arg Pro Ser
 50 55 60
 Cys Cys Gln Thr Thr Cys Cys Arg Thr Thr Cys Cys Arg Pro Ser Cys
 65 70 75 80
 Cys Val Ser Ser Cys Cys Arg Pro Gln Cys Cys Gln Ser Val Cys Cys
 85 90 95
 Gln Pro Thr Cys Cys Arg Pro Ser Cys Cys Gln Thr Thr Cys Cys Arg
 100 105 110
 Thr Thr Cys Cys Arg Pro Ser Cys Cys Val Ser Ser Cys Cys Arg Pro
 115 120 125
 Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys Cys Arg Pro Ser
 130 135 140
 Cys Cys Ile Ser Ser Ser Cys Cys Pro Ser Cys Cys Glu Ser Ser Cys
 145 150 155 160
 Cys Arg Pro Cys Cys Cys Leu Arg Pro Val Cys Gly Arg Val Ser Cys
 165 170 175
 His Thr Thr Cys Tyr Arg Pro Thr Cys Val Ile Ser Thr Cys Pro Arg
 180 185 190
 Pro Leu Cys Cys Ala Ser Ser Cys Cys
 195 200

<210> 412

<211> 186

<212> PRT

<213> Homo sapiens

<400> 412

```

Met Val Ser Ser Cys Cys Gly Ser Val Ser Ser Glu Gln Ser Cys Gly
1          5          10
Leu Glu Asn Cys Cys Arg Pro Ser Cys Cys Gln Thr Thr Cys Cys Arg
20          25          30
Thr Thr Cys Cys Arg Pro Ser Cys Cys Lys Pro Gln Cys Cys Gln Ser
35          40          45
Val Cys Tyr Gln Pro Thr Cys Cys His Pro Ser Cys Cys Ile Ser Ser
50          55          60
Cys Cys His Pro Tyr Cys Cys Glu Ser Ser Cys Cys Arg Pro Cys Cys
65          70          75          80
Cys Arg Pro Ser Cys Cys Gln Thr Thr Cys Cys Arg Thr Thr Cys Cys
85          90          95
Arg Thr Thr Cys Cys Cys Pro Ser Cys Cys Val Ser Ser Cys Cys Arg
100          105          110
Pro Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys Cys Arg Pro
115          120          125
Ser Cys Cys Ile Ser Ser Cys Cys His Pro Ser Cys Cys Glu Ser Ser
130          135          140
Cys Cys Arg Pro Cys Cys Cys Val Arg Pro Val Cys Gly Arg Val Ser
145          150          155          160
Cys His Thr Thr Cys Tyr Arg Pro Thr Cys Val Ile Ser Thr Cys Pro
165          170          175
Arg Pro Leu Cys Cys Ala Ser Ser Cys Cys
180          185

```

<210> 413

<211> 106

<212> PRT

<213> Homo sapiens

<400> 413

```

Met Val Asn Ser Cys Cys Gly Ser Val Cys Ser Asp Gln Gly Cys Gly
1          5          10          15
Leu Glu Asn Cys Cys Arg Pro Ser Tyr Cys Gln Thr Thr Cys Cys Arg
20          25          30
Thr Thr Cys Cys Arg Pro Ser Cys Cys Arg Pro Ser Cys Cys Arg Pro
35          40          45
Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys Cys Cys Pro Ser
50          55          60
Tyr Cys Val Ser Ser Cys Cys Arg Pro Gln Cys Cys Gln Thr Thr Arg
65          70          75          80
Cys Arg Thr Thr Cys Cys Arg Pro Ser Cys Cys Val Ser Arg Cys Tyr
85          90          95
Arg Pro His Cys Gly Gln Ser Leu Cys Cys
100          105

```

<210> 414

<211> 166

<212> PRT

<213> Homo sapiens

<400> 414

```

Met Val Asn Ser Cys Cys Gly Ser Val Cys Ser Asp Gln Gly Cys Gly
1      5      10      15
Leu Glu Asn Cys Cys Arg Pro Ser Tyr Cys Gln Thr Thr Cys Cys Arg
20      25      30
Thr Thr Cys Cys Arg Pro Ser Cys Cys Val Ser Ser Cys Cys Arg Pro
35      40      45
Gln Cys Cys Gln Thr Thr Cys Cys Arg Thr Thr Cys Cys His Pro Ser
50      55      60
Cys Cys Val Ser Ser Cys Cys Arg Pro Gln Cys Cys Gln Ser Val Cys
65      70      75      80
Cys Gln Pro Thr Cys Cys Arg Pro Gln Cys Cys Gln Thr Thr Cys Cys
85      90      95
Arg Thr Thr Cys Cys Arg Pro Ser Cys Cys Arg Pro Gln Cys Cys Gln
100     105     110
Ser Val Cys Cys Gln Pro Thr Cys Cys Cys Pro Ser Tyr Cys Val Ser
115     120     125
Ser Cys Cys Arg Pro Gln Cys Cys Gln Thr Thr Cys Cys Arg Thr Thr
130     135     140
Cys Cys Arg Pro Ser Cys Cys Val Ser Arg Cys Tyr Arg Pro His Cys
145     150     155     160
Gly Gln Ser Leu Cys Cys
165

```

<210> 415

<211> 136

<212> PRT

<213> Homo sapiens

<400> 415

```

Met Val Asn Ser Cys Cys Gly Ser Val Cys Ser Asp Gln Gly Cys Gly
1      5      10      15
Leu Glu Asn Cys Cys Arg Pro Ser Cys Cys Gln Thr Thr Cys Cys Arg
20      25      30
Thr Thr Cys Cys Arg Pro Ser Cys Cys Val Ser Ser Cys Cys Arg Pro
35      40      45
Gln Cys Cys Gln Ser Val Cys Cys Gln Pro Thr Cys Cys Ser Pro Ser
50      55      60
Cys Cys Gln Thr Thr Cys Cys Arg Thr Thr Cys Cys Arg Pro Ser Cys
65      70      75      80
Cys Val Ser Ser Cys Phe Arg Pro Gln Cys Cys Gln Ser Val Cys Cys
85      90      95
Gln Pro Thr Cys Cys Arg Pro Ser Cys Gly Gln Thr Thr Cys Cys Arg
100     105     110
Thr Thr Cys Tyr Arg Pro Ser Cys Cys Val Ser Thr Cys Cys Arg Pro
115     120     125
Thr Cys Ser Ser Gly Ser Cys Cys
130     135

```

<210> 416

<211> 127

<212> PRT

<213> Homo sapiens

<400> 416
 Met Val Asn Ser Cys Cys Gly Ser Val Cys Ser Asp Gln Gly Cys Asp
 1 5 10 15
 Gln Gly Leu Cys Gln Glu Thr Cys Cys Arg Pro Ser Cys Cys Gln Thr
 20 25 30
 Thr Cys Cys Cys Pro Ser Cys Val Val Ser Ser Cys Cys Arg Pro Ser
 35 40 45
 Cys Ser Gln Thr Thr Cys Cys Gln Thr Thr Cys Cys Arg Pro Ser Cys
 50 55 60
 Cys Arg Pro Val Cys Cys Gln Thr Thr Cys Arg Pro Ser Cys Gly Val
 65 70 75 80
 Ser Ser Cys Cys Arg Pro Leu Cys Cys Gln Thr Thr Cys Arg Pro Ser
 85 90 95
 Cys Gly Val Ser Ser Cys Cys Arg Pro Leu Cys Cys Gln Thr Thr Cys
 100 105 110
 Cys Arg Thr Thr Cys Cys Arg Pro Ser Cys Cys Gly Ser Ser Cys
 115 120 125
 <210> 417
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 417
 Met Thr His Cys Cys Ser Pro Cys Cys Gln Pro Thr Cys Cys Arg Thr
 1 5 10 15
 Thr Cys Cys Arg Thr Thr Cys Trp Lys Pro Thr Thr Val Thr Thr Cys
 20 25 30
 Ser Ser Thr Pro Cys Cys Gln Pro Ala Cys Cys Val Ser Ser Cys Cys
 35 40 45
 Gln Pro Cys Cys Arg Pro Thr Cys Cys Gln Asn Thr Cys Cys Arg Thr
 50 55 60
 Thr Cys Cys Gln Pro Thr Cys Val Thr Ser Cys Cys Gln Pro Ser Cys
 65 70 75 80
 Cys Ser Thr Pro Cys Cys Gln Pro Thr Cys Cys Gly Ser Ser Cys Cys
 85 90 95
 Gly Gln Thr Ser Cys Gly Ser Ser Cys Gly Gln Ser Ser Ser Cys Ala
 100 105 110
 Pro Val Tyr Cys Arg Arg Thr Cys Tyr Tyr Pro Thr Thr Val Cys Leu
 115 120 125
 Pro Gly Cys Leu Asn Gln Ser Cys Gly Ser Asn Cys Cys Gln Pro Cys
 130 135 140
 Cys Arg Pro Ala Cys Cys Glu Thr Thr Cys Cys Arg Thr Thr Cys Phe
 145 150 155 160
 Gln Pro Thr Cys Val Ser Ser Cys Cys Gln Pro Ser Cys Cys
 165 170
 <210> 418
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 418
 Met Thr His Cys Cys Ser Pro Cys Cys Gln Pro Thr Cys Cys Arg Thr
 1 5 10 15
 Thr Cys Trp Gln Pro Thr Thr Val Thr Thr Cys Ser Ser Thr Pro Cys
 20 25 30

Cys Gln Pro Ser Cys Cys Val Ser Ser Cys Cys Gln Pro Cys Cys His
 35 40 45
 Pro Thr Cys Cys Gln Asn Thr Cys Cys Arg Thr Thr Cys Cys Gln Pro
 50 55 60
 Ile Cys Val Thr Ser Cys Cys Gln Pro Ser Cys Cys Ser Thr Pro Cys
 65 70 75 80
 Cys Gln Pro Thr Cys Cys Gly Ser Ser Cys Gly Gln Ser Ser Ser Cys
 85 90 95
 Ala Pro Val Tyr Cys Arg Arg Thr Cys Tyr His Pro Thr Ser Val Cys
 100 105 110
 Leu Pro Gly Cys Leu Asn Gln Ser Cys Gly Ser Asn Cys Cys Gln Pro
 115 120 125
 Cys Cys Arg Pro Ala Cys Cys Glu Thr Thr Cys Cys Arg Thr Thr Cys
 130 135 140
 Phe Gln Pro Thr Cys Val Tyr Ser Cys Cys Gln Pro Ser Cys Cys
 145 150 155
 <210> 419
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 419
 Met Thr His Cys Cys Ser Pro Cys Cys Gln Pro Thr Cys Cys Arg Thr
 1 5 10 15
 Thr Cys Trp Lys Pro Thr Thr Val Thr Thr Cys Ser Ser Thr Pro Cys
 20 25 30
 Cys Gln Pro Ser Cys Cys Val Ser Cys Cys Gln Pro Cys Cys Arg
 35 40 45
 Pro Thr Cys Cys Gln Asn Thr Cys Cys Gln Pro Ile Cys Val Thr Ser
 50 55 60
 Cys Cys Gln Pro Ser Cys Cys Ser Thr Pro Cys Cys Gln Pro Thr Cys
 65 70 75 80
 Cys Gly Gln Thr Ser Cys Gly Ser Ser Cys Gly Gln Ser Ser Ser Cys
 85 90 95
 Ala Pro Val Tyr Cys Arg Arg Thr Cys Tyr His Pro Thr Thr Val Cys
 100 105 110
 Leu Pro Gly Cys Leu Asn Gln Ser Cys Gly Ser Ser Cys Cys Gln Pro
 115 120 125
 Cys Cys Arg Pro Ala Cys Cys Glu Thr Thr Cys Cys Arg Thr Thr Cys
 130 135 140
 Phe Gln Pro Thr Cys Val Tyr Ser Cys Cys Gln Pro Ser Cys Cys
 145 150 155
 <210> 420
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 420
 Met Thr His Cys Cys Ser Pro Cys Cys Gln Pro Thr Cys Cys Arg Thr
 1 5 10 15
 Thr Cys Cys Arg Thr Thr Cys Trp Lys Pro Thr Thr Val Thr Thr Cys
 20 25 30
 Ser Ser Thr Pro Cys Cys Gln Pro Cys Cys Val Ser Ser Cys Cys
 35 40 45
 Gln Pro Cys Cys Arg Pro Ala Cys Cys Gln Asn Thr Cys Cys Arg Thr
 50 55 60

Thr Cys Cys Gln Pro Thr Cys Leu Ser Ser Cys Cys Gly Gln Thr Ser
 65 70 75 80
 Cys Gly Ser Ser Cys Gly Gln Ser Ser Ser Cys Ala Pro Val Tyr Cys
 85 90 95
 Arg Arg Thr Cys Tyr Tyr Pro Thr Thr Val Cys Leu Pro Gly Cys Leu
 100 105 110
 Asn Gln Ser Cys Gly Ser Ser Cys Cys Gln Pro Cys Cys Arg Pro Ala
 115 120 125
 Cys Cys Glu Thr Thr Cys Cys Arg Thr Thr Cys Phe Gln Pro Thr Cys
 130 135 140
 Val Ser Ser Cys Cys Gln Pro Ser Cys Cys
 145 150
 <210> 421
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 421
 Met Thr His Cys Cys Ser Pro Cys Cys Gln Pro Thr Cys Cys Arg Thr
 1 5 10 15
 Thr Cys Cys Arg Thr Thr Cys Trp Lys Pro Thr Thr Val Thr Thr Cys
 20 25 30
 Ser Ser Thr Pro Cys Cys Gln Pro Ser Cys Cys Val Ser Ser Cys Cys
 35 40 45
 Gln Pro Cys Cys Arg Pro Thr Cys Cys Gln Asn Thr Cys Cys Gln Pro
 50 55 60
 Thr Cys Val Thr Ser Cys Cys Gln Pro Ser Cys Cys Ser Thr Pro Cys
 65 70 75 80
 Cys Gln Pro Thr Cys Cys Gly Ser Ser Cys Asp Gln Ser Ser Ser Cys
 85 90 95
 Ala Pro Val Tyr Cys Arg Arg Thr Cys Tyr Tyr Pro Thr Thr Val Cys
 100 105 110
 Leu Pro Gly Cys Leu Asn Gln Ser Cys Gly Ser Asn Cys Cys Gln Pro
 115 120 125
 Cys Cys Arg Pro Ala Cys Cys Glu Thr Thr Cys Phe Gln Pro Thr Cys
 130 135 140
 Val Ser Ser Cys Cys Gln Pro Phe Cys Cys
 145 150
 <210> 422
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 422
 Met Leu Gln Asp His Leu Leu Gln Asp Asn Leu Leu Glu Ala His His
 1 5 10 15
 Cys Asp His Leu Gln Gln His Ile Leu Leu Pro Ala Leu Leu Leu Cys
 20 25 30
 Val Gln Leu Leu Pro Ala Leu Leu Pro Pro Asn Leu Leu Ser Lys His
 35 40 45
 Leu Leu Gln Asp His Leu Leu Pro Ala His Leu Cys Asp Gln Leu Leu
 50 55 60
 Pro Ala Phe Leu Leu Gln His Thr Leu Leu Thr Ala His Leu Leu Trp
 65 70 75 80
 Val Gln Leu Leu Trp Pro Asn His Leu Trp Val Gln Leu Leu Pro Ala
 85 90 95

Gln Leu Leu Cys Thr His Leu Leu Gln Glu Asn Leu Leu Pro Pro His
 100 105 110
 Glu Cys Leu Pro Ala Trp Leu Pro Lys Ser Glu Leu Trp Leu Gln Leu
 115 120 125
 Leu Pro Ala Leu Leu Pro Pro Ser Leu Leu
 130 135
 <210> 423
 <211> 409
 <212> PRT
 <213> Homo sapiens

<400> 423
 Met Ser Gly Ser Cys Ser Ser Arg Lys Cys Phe Ser Val Pro Ala Thr
 1 5 10 15
 Ser Leu Cys Ser Thr Glu Val Ser Cys Gly Gly Pro Ile Cys Leu Pro
 20 25 30
 Ser Ser Cys Gln Ser Gln Thr Trp Gln Leu Val Thr Cys Gln Asp Ser
 35 40 45
 Cys Gly Ser Ser Ser Cys Gly Pro Gln Cys Arg Gln Pro Ser Cys Pro
 50 55 60
 Val Ser Ser Cys Ala Gln Pro Leu Cys Cys Asp Pro Val Ile Cys Glu
 65 70 75 80
 Pro Ser Cys Ser Val Ser Ser Gly Cys Gln Pro Val Cys Cys Glu Ala
 85 90 95
 Thr Thr Cys Glu Pro Ser Cys Ser Val Ser Asn Cys Tyr Gln Pro Val
 100 105 110
 Cys Phe Glu Ala Thr Ile Cys Glu Pro Ser Cys Ser Val Ser Asn Cys
 115 120 125
 Cys Gln Pro Val Cys Phe Glu Ala Thr Val Cys Glu Pro Ser Cys Ser
 130 135 140
 Val Ser Ser Cys Ala Gln Pro Val Cys Cys Glu Pro Ala Ile Cys Glu
 145 150 155 160
 Pro Ser Cys Ser Val Ser Ser Cys Cys Gln Pro Val Gly Ser Glu Ala
 165 170 175
 Thr Ser Cys Gln Pro Val Leu Cys Val Pro Thr Ser Cys Gln Pro Val
 180 185 190
 Leu Cys Lys Ser Ser Cys Cys Gln Pro Val Val Cys Glu Pro Ser Cys
 195 200 205
 Cys Ser Ala Val Cys Thr Leu Pro Ser Ser Cys Gln Pro Val Val Cys
 210 215 220
 Glu Pro Ser Cys Cys Gln Pro Val Cys Pro Thr Pro Thr Cys Ser Val
 225 230 235 240
 Thr Ser Ser Cys Gln Ala Val Cys Cys Asp Pro Ser Pro Trp Ser Ser
 245 250 255
 Ala Ser Ala Ile Cys Arg Pro Thr Cys Pro Arg Thr Phe Tyr Ile Pro
 260 265 270
 Ser Ser Ser Lys Arg Pro Cys Ser Ala Thr Ile Ser Tyr Arg Pro Val
 275 280 285
 Ser Arg Pro Ile Cys Arg Pro Ile Cys Ser Gly Leu Leu Thr Tyr Arg
 290 295 300
 Gln Pro Tyr Met Thr Ser Ile Ser Tyr Arg Pro Ala Cys Tyr Arg Pro
 305 310 315 320
 Cys Tyr Ser Ile Leu Arg Arg Pro Ala Cys Val Thr Ser Tyr Ser Cys
 325 330 335
 Arg Pro Val Tyr Phe Arg Pro Ser Cys Thr Glu Ser Asp Ser Cys Lys
 340 345 350
 Arg Asp Cys Lys Lys Ser Thr Ser Ser Gln Leu Asp Cys Val Asp Thr
 355 360 365
 Thr Pro Cys Lys Val Asp Val Ser Glu Glu Ala Pro Cys Gln Pro Thr
 370 375 380

Glu Ala Lys Pro Ile Ser Pro Thr Thr Arg Glu Ala Ala Ala Ala Gln
 385 390 395 400
 Pro Ala Ala Ser Lys Pro Ala Asn Cys
 405

<210> 424

<211> 105

<212> PRT

<213> Homo sapiens

<400> 424
 Met Gly Cys Cys Pro Gly Asp Cys Phe Thr Cys Cys Thr Gln Glu Gln
 1 5 10 15
 Asn Cys Cys Glu Glu Cys Cys Cys Gln Pro Gly Cys Cys Gly Cys Cys
 20 25 30
 Gly Ser Cys Cys Gly Cys Gly Gly Ser Gly Cys Gly Gly Ser Gly Cys
 35 40 45
 Gly Gly Ser Cys Cys Gly Ser Ser Cys Cys Gly Ser Gly Cys Gly Gly
 50 55 60
 Cys Gly Gly Cys Gly Gly Cys Gly Gly Cys Cys Gly Ser Ser Cys
 65 70 75 80
 Cys Gly Ser Ser Cys Cys Gly Ser Gly Cys Cys Gly Pro Val Cys Cys
 85 90 95
 Gln Pro Thr Pro Ile Cys Asp Thr Lys
 100 105

<210> 425

<211> 404

<212> PRT

<213> Homo sapiens

<400> 425
 Met Ser Tyr Ser Cys Gly Leu Pro Ser Leu Ser Cys Arg Thr Ser Cys
 1 5 10 15
 Ser Ser Arg Pro Cys Val Pro Pro Ser Cys His Gly Cys Thr Leu Pro
 20 25 30
 Gly Ala Cys Asn Ile Pro Ala Asn Val Ser Asn Cys Asn Trp Phe Cys
 35 40 45
 Glu Gly Ser Phe Asn Gly Ser Glu Lys Glu Thr Met Gln Phe Leu Asn
 50 55 60
 Asp Arg Leu Ala Ser Tyr Leu Glu Lys Val Arg Gln Leu Glu Arg Asp
 65 70 75 80
 Asn Ala Glu Leu Glu Asn Leu Ile Arg Glu Arg Ser Gln Gln Gln Glu
 85 90 95
 Pro Leu Val Cys Ala Ser Tyr Gln Ser Tyr Phe Lys Thr Ile Glu Glu
 100 105 110
 Leu Gln Gln Lys Ile Leu Cys Ser Lys Ser Glu Asn Ala Arg Leu Val
 115 120 125
 Val Gln Ile Asp Asn Ala Lys Leu Ala Ser Asp Asp Phe Arg Thr Lys
 130 135 140
 Tyr Glu Thr Glu Leu Ser Leu Arg Gln Leu Val Glu Ser Asp Ile Asn
 145 150 155 160
 Gly Leu Arg Arg Ile Leu Asp Glu Leu Thr Leu Cys Arg Ser Asp Leu
 165 170 175
 Glu Ala Gln Val Glu Ser Leu Lys Glu Glu Leu Leu Cys Leu Lys Gln
 180 185 190
 Asn His Glu Gln Glu Val Asn Thr Leu Arg Cys Gln Leu Gly Asp Arg
 195 200 205

Leu Asn Val Glu Val Asp Ala Ala Pro Thr Val Asp Leu Asn Gln Val
 210 215 220
 Leu Asn Glu Thr Arg Ser Gln Tyr Glu Ala Leu Val Glu Thr Asn Arg
 225 230 235 240
 Arg Glu Val Glu Gln Trp Phe Ala Thr Gln Thr Glu Glu Leu Asn Lys
 245 250 255
 Gln Val Val Ser Ser Ser Glu Gln Leu Gln Ser Tyr Gln Ala Glu Ile
 260 265 270
 Ile Glu Leu Arg Arg Thr Val Asn Ala Leu Glu Ile Glu Leu Gln Ala
 275 280 285
 Gln His Asn Leu Arg Asp Ser Leu Glu Asn Thr Leu Thr Glu Ser Glu
 290 295 300
 Ala Arg Tyr Ser Ser Gln Leu Ser Gln Val Gln Arg Leu Ile Thr Asn
 305 310 315 320
 Val Glu Ser Gln Leu Ala Glu Ile Arg Ser Asp Leu Glu Arg Gln Asn
 325 330 335
 Gln Glu Tyr Gln Val Leu Leu Asp Val Arg Ala Arg Leu Glu Cys Glu
 340 345 350
 Ile Asn Thr Tyr Arg Ser Leu Leu Glu Ser Glu Asp Cys Lys Leu Pro
 355 360 365
 Ser Asn Pro Cys Ala Thr Thr Asn Ala Cys Asp Lys Ser Thr Gly Pro
 370 375 380
 Cys Ile Ser Asn Pro Cys Gly Leu Arg Ala Arg Cys Gly Pro Cys Asn
 385 390 395 400
 Thr Phe Gly Tyr

<210> 426

<211> 404

<212> PRT

<213> Homo sapiens

<400> 426

Met Pro Tyr Asn Phe Cys Leu Pro Ser Leu Ser Cys Arg Thr Ser Cys
 1 5 10 15
 Ser Ser Arg Pro Cys Val Pro Pro Ser Cys His Gly Tyr Thr Leu Pro
 20 25 30
 Gly Ala Cys Asn Ile Pro Ala Asn Val Ser Asn Cys Asn Trp Phe Cys
 35 40 45
 Glu Gly Ser Phe Asn Gly Ser Glu Lys Glu Thr Met Gln Phe Leu Asn
 50 55 60
 Asp Arg Leu Ala Ser Tyr Leu Glu Lys Val Arg Gln Leu Glu Arg Asp
 65 70 75 80
 Asn Ala Glu Leu Glu Asn Leu Ile Arg Glu Arg Ser Gln Gln Gln Glu
 85 90 95
 Pro Leu Leu Cys Pro Ser Tyr Gln Ser Tyr Phe Lys Thr Ile Glu Glu
 100 105 110
 Leu Gln Gln Lys Ile Leu Cys Ser Lys Ser Glu Asn Ala Arg Leu Val
 115 120 125
 Val Gln Ile Asp Asn Ala Lys Leu Ala Ala Asp Asp Phe Arg Thr Lys
 130 135 140
 Tyr Gln Thr Glu Gln Ser Leu Arg Gln Leu Val Glu Ser Asp Ile Asn
 145 150 155 160
 Ser Leu Arg Arg Ile Leu Asp Glu Leu Thr Leu Cys Arg Ser Asp Leu
 165 170 175
 Glu Ala Gln Met Glu Ser Leu Lys Glu Glu Leu Leu Ser Leu Lys Gln
 180 185 190
 Asn His Glu Gln Glu Val Asn Thr Leu Arg Cys Gln Leu Gly Asp Arg
 195 200 205
 Leu Asn Val Glu Val Asp Ala Ala Pro Ala Val Asp Leu Asn Gln Val
 210 215 220

```

Leu Asn Glu Thr Arg Asn Gln Tyr Glu Ala Leu Val Glu Thr Asn Arg
225          230          235          240
Arg Glu Val Glu Gln Trp Phe Ala Thr Gln Thr Glu Glu Leu Asn Lys
          245          250          255
Gln Val Val Ser Ser Ser Glu Gln Leu Gln Ser Tyr Gln Ala Glu Ile
          260          265          270
Ile Glu Leu Arg Arg Thr Val Asn Ala Leu Glu Ile Glu Leu Gln Ala
          275          280          285
Gln His Asn Leu Arg Tyr Ser Leu Glu Asn Thr Leu Thr Glu Ser Glu
          290          295          300
Ala Arg Tyr Ser Ser Gln Leu Ser Gln Val Gln Ser Leu Ile Thr Asn
305          310          315          320
Val Glu Ser Gln Leu Ala Glu Ile Arg Ser Asp Leu Glu Arg Gln Asn
          325          330          335
Gln Glu Tyr Gln Val Leu Leu Asp Val Arg Ala Arg Leu Glu Cys Glu
          340          345          350
Ile Asn Thr Tyr Arg Ser Leu Leu Glu Ser Glu Asp Cys Lys Leu Pro
          355          360          365
Ser Asn Pro Cys Ala Thr Thr Asn Ala Cys Glu Lys Pro Ile Gly Ser
          370          375          380
Cys Val Thr Asn Pro Cys Gly Pro Arg Ser Arg Cys Gly Pro Cys Asn
385          390          395          400
Thr Phe Gly Tyr

```

<210> 427

<211> 436

<212> PRT

<213> Homo sapiens

<400> 427

```

Met Leu Tyr Ala Lys Pro Pro Pro Thr Ile Asn Gly Ile Lys Gly Leu
1          5          10          15
Gln Arg Lys Glu Arg Leu Lys Pro Ala His Ile His Leu Gln Gln Leu
          20          25          30
Thr Cys Phe Ser Ile Thr Cys Ser Thr Met Ser Tyr Ser Cys Cys
          35          40          45
Leu Pro Ser Leu Gly Cys Arg Thr Ser Cys Ser Ser Arg Pro Cys Val
          50          55          60
Pro Pro Ser Cys His Gly Tyr Thr Leu Pro Gly Ala Cys Asn Ile Pro
          65          70          75          80
Ala Asn Val Ser Asn Cys Asn Trp Phe Cys Glu Gly Ser Phe Asn Gly
          85          90          95
Ser Glu Lys Glu Thr Met Gln Phe Leu Asn Asp Arg Leu Ala Ser Tyr
          100          105          110
Leu Glu Lys Val Arg Gln Leu Glu Arg Asp Asn Ala Glu Leu Glu Lys
          115          120          125
Leu Ile Gln Glu Arg Ser Gln Gln Gln Glu Pro Leu Leu Cys Pro Ser
          130          135          140
Tyr Gln Ser Tyr Phe Lys Thr Ile Glu Glu Leu Gln Gln Lys Ile Leu
          145          150          155          160
Cys Ala Lys Ala Glu Asn Ala Arg Leu Val Val Asn Ile Asp Asn Ala
          165          170          175          180
Lys Leu Ala Ser Asp Asp Phe Arg Ser Lys Tyr Gln Thr Glu Gln Ser
          180          185          190
Leu Arg Leu Leu Val Glu Ser Asp Ile Asn Ser Ile Arg Arg Ile Leu
          195          200          205
Asp Glu Leu Thr Leu Cys Lys Ser Asp Leu Glu Ser Gln Val Glu Ser
          210          215          220
Leu Arg Glu Glu Leu Ile Cys Leu Lys Lys Asn His Glu Glu Glu Val
225          230          235          240

```

Asn Thr Leu Arg Ser Gln Leu Gly Asp Arg Leu Asn Val Glu Val Asp
 245 250 255
 Thr Ala Pro Thr Val Asp Leu Asn Gln Val Leu Asn Glu Thr Arg Ser
 260 265 270
 Gln Tyr Glu Ala Leu Val Glu Ile Asn Arg Arg Glu Val Glu Gln Trp
 275 280 285
 Phe Ala Thr Gln Thr Glu Glu Leu Asn Lys Gln Val Val Ser Ser Ser
 290 295 300
 Glu Gln Leu Gln Ser Cys Gln Ala Glu Ile Ile Glu Leu Arg Arg Thr
 305 310 315 320
 Val Asn Ala Leu Glu Ile Glu Leu Gln Ala Gln His Asn Leu Arg Asp
 325 330 335
 Ser Leu Glu Asn Thr Leu Thr Glu Ser Glu Ala His Tyr Ser Ser Gln
 340 345 350
 Leu Ser Gln Val Gln Ser Leu Ile Thr Asn Val Glu Ser Gln Leu Ala
 355 360 365
 Glu Ile Arg Cys Asp Leu Glu Arg Gln Asn Gln Glu Tyr Gln Val Leu
 370 375 380
 Leu Asp Val Arg Ala Arg Leu Glu Cys Glu Ile Asn Thr Tyr Arg Ser
 385 390 395 400
 Leu Leu Glu Ser Glu Asp Cys Lys Leu Pro Cys Asn Pro Cys Ala Thr
 405 410 415
 Thr Asn Ala Ser Gly Asn Ser Cys Gly Pro Cys Gly Thr Ser Gln Lys
 420 425 430
 Gly Cys Cys Asn
 435
 <210> 428
 <211> 416
 <212> PRT
 <213> Homo sapiens

<400> 428
 Met Pro Tyr Asn Phe Cys Leu Pro Ser Leu Ser Cys Arg Thr Ser Cys
 1 5 10 15
 Ser Ser Arg Pro Cys Val Pro Pro Ser Cys His Ser Cys Thr Leu Pro
 20 25 30
 Gly Ala Cys Asn Ile Pro Ala Asn Val Ser Asn Cys Asn Trp Phe Cys
 35 40 45
 Glu Gly Ser Phe Asn Gly Ser Glu Lys Glu Thr Met Gln Phe Leu Asn
 50 55 60
 Asp Arg Leu Ala Ser Tyr Leu Glu Lys Val Arg Gln Leu Glu Arg Asp
 65 70 75 80
 Asn Ala Glu Leu Glu Asn Leu Ile Arg Glu Arg Ser Gln Gln Gln Glu
 85 90 95
 Pro Leu Leu Cys Pro Ser Tyr Gln Ser Tyr Phe Lys Thr Ile Glu Glu
 100 105 110
 Leu Gln Gln Lys Ile Leu Cys Thr Lys Ser Glu Asn Ala Arg Leu Val
 115 120 125
 Val Gln Ile Asp Asn Ala Lys Leu Ala Ala Asp Asp Phe Arg Thr Lys
 130 135 140
 Tyr Gln Thr Glu Leu Ser Leu Arg Gln Leu Val Glu Ser Asp Ile Asn
 145 150 155 160
 Gly Leu Arg Arg Ile Leu Asp Glu Leu Thr Leu Cys Lys Ser Asp Leu
 165 170 175
 Glu Ala Gln Val Glu Ser Leu Lys Glu Glu Leu Leu Cys Leu Lys Ser
 180 185 190
 Asn His Glu Gln Glu Val Asn Thr Leu Arg Cys Gln Leu Gly Asp Arg
 195 200 205
 Leu Asn Val Glu Val Asp Ala Pro Thr Val Asp Leu Asn Arg Val
 210 215 220

Leu Asn Glu Thr Arg Ser Gln Tyr Glu Ala Leu Val Glu Thr Asn Arg
 225 230 235 240
 Arg Glu Val Glu Gln Trp Phe Thr Thr Gln Thr Glu Glu Leu Asn Lys
 245 250 255
 Gln Val Val Ser Ser Ser Glu Gln Leu Gln Ser Tyr Gln Ala Glu Ile
 260 265 270
 Ile Glu Leu Arg Arg Thr Val Asn Ala Leu Glu Ile Glu Leu Gln Ala
 275 280 285
 Gln His Asn Leu Arg Asp Ser Leu Glu Asn Thr Leu Thr Glu Ser Glu
 290 295 300
 Ala Arg Tyr Ser Ser Gln Leu Ser Gln Val Gln Ser Leu Ile Thr Asn
 305 310 315 320
 Val Glu Ser Gln Leu Ala Glu Ile Arg Ser Asp Leu Glu Arg Gln Asn
 325 330 335
 Gln Glu Tyr Gln Val Leu Leu Asp Val Arg Ala Arg Leu Glu Cys Glu
 340 345 350
 Ile Asn Thr Tyr Arg Ser Leu Leu Glu Ser Glu Asp Cys Asn Leu Pro
 355 360 365
 Ser Asn Pro Cys Ala Thr Thr Asn Ala Cys Ser Lys Pro Ile Gly Pro
 370 375 380
 Cys Leu Ser Asn Pro Cys Thr Ser Cys Val Pro Pro Ala Pro Cys Thr
 385 390 395 400
 Pro Cys Ala Pro Arg Pro Arg Cys Gly Pro Cys Asn Ser Phe Val Arg
 405 410 415
 <210> 429
 <211> 201
 <212> PRT
 <213> Homo sapiens

<400> 429
 Met Thr Ser Asp His Cys Ser Ser Leu Leu Ser Gly Gln Val Ser Glu
 1 5 10 15
 Ala Asn Ala Ala Ser Leu Cys Leu Leu Ala Asn Val Ala His Ala Asn
 20 25 30
 Arg Val Arg Val Gly Ser Thr Pro Leu Gly Arg Leu Ser Leu Cys Leu
 35 40 45
 Pro Pro Thr Cys His Thr Thr Cys Pro Leu Pro Gly Thr Cys His Ile
 50 55 60
 Pro Gly Asn Ile Gly Ile Cys Gly Ala Tyr Arg Glu Asn Thr Leu Asn
 65 70 75 80
 Gly His Glu Lys Glu Thr Met Gln Phe Leu Asn Asp Arg Leu Ala Asn
 85 90 95
 Tyr Leu Glu Lys Val Arg Gln Leu Glu Trp Asp Asn Ala Glu Leu Glu
 100 105 110
 Thr Lys Leu His Glu Arg Ser Lys Cys His Glu Ser Ser Val Cys Arg
 115 120 125
 Asn Tyr Gln Ser Tyr Phe Cys Thr Ile Gln Glu Leu Gln Gln Lys Val
 130 135 140
 Arg Phe Ala Val His Gln Ile Arg Gly Gln Glu Ser Ala Tyr Cys Leu
 145 150 155 160
 Ser Ala Lys Ser Gly Pro Pro Pro Ala Phe Ala Asn Lys Val Leu Leu
 165 170 175
 Val His Gly His Ala His Ala Phe Val Cys Cys Leu Gln Leu Leu Leu
 180 185 190
 Tyr Tyr Ser Gly Arg Val Gln Ser Leu
 195 200
 <210> 430
 <211> 471
 <212> PRT

<213> Homo sapiens

<400> 430

```

Met Thr Ser Phe Tyr Ser Thr Ser Ser Cys Pro Leu Gly Cys Thr Met
1      5      10      15
Ala Pro Gly Ala Arg Asn Val Phe Val Ser Pro Ile Asp Val Gly Cys
20      25      30
Gln Pro Val Ala Glu Ala Asn Ala Ala Ser Met Cys Leu Leu Ala Asn
35      40      45
Val Ala His Ala Asn Arg Val Arg Val Gly Ser Thr Pro Leu Gly Arg
50      55      60
Pro Ser Leu Cys Leu Pro Pro Thr Ser His Thr Ala Cys Pro Leu Pro
65      70      75      80
Gly Thr Cys His Ile Pro Gly Asn Ile Gly Ile Cys Gly Ala Tyr Gly
85      90      95
Lys Asn Thr Leu Asn Gly His Glu Lys Glu Thr Met Lys Phe Leu Asn
100      105      110
Asp Arg Leu Ala Asn Tyr Leu Glu Lys Val Arg Gln Leu Glu Gln Glu
115      120      125
Asn Ala Glu Leu Glu Thr Thr Leu Leu Glu Arg Ser Lys Cys His Glu
130      135      140
Ser Thr Val Cys Pro Asp Tyr Gln Ser Tyr Phe Arg Thr Ile Glu Glu
145      150      155      160
Leu Gln Gln Lys Ile Leu Cys Ser Lys Ala Glu Asn Ala Arg Leu Ile
165      170      175
Val Gln Ile Asp Asn Ala Lys Leu Ala Ala Asp Asp Phe Arg Ile Lys
180      185      190
Leu Glu Ser Glu Arg Ser Leu His Gln Leu Val Glu Ala Asp Lys Cys
195      200      205
Gly Thr Gln Lys Leu Leu Asp Ala Thr Leu Ala Lys Ala Asp Leu
210      215      220
Glu Ala Gln Gln Glu Ser Leu Lys Glu Glu Gln Leu Ser Leu Lys Ser
225      230      235      240
Asn His Glu Gln Glu Val Lys Ile Leu Arg Ser Gln Leu Gly Glu Lys
245      250      255
Phe Arg Ile Glu Leu Asp Ile Glu Pro Thr Ile Asp Leu Asn Arg Val
260      265      270
Leu Gly Glu Met Arg Ala Gln Tyr Glu Ala Met Val Glu Thr Asn His
275      280      285
Gln Asp Val Glu Gln Trp Phe Gln Ala Gln Ser Glu Gly Ile Ser Leu
290      295      300
Gln Ala Met Ser Cys Ser Glu Glu Leu Gln Cys Cys Gln Ser Glu Ile
305      310      315      320
Leu Glu Leu Arg Cys Thr Val Asn Ala Leu Glu Val Glu Arg Gln Ala
325      330      335
Gln His Thr Leu Lys Asp Cys Leu Gln Asn Ser Leu Cys Glu Ala Glu
340      345      350
Asp Arg Tyr Gly Thr Glu Leu Ala Gln Met Gln Ser Leu Ile Ser Asn
355      360      365
Leu Glu Glu Gln Leu Ser Glu Ile Arg Ala Asp Leu Glu Arg Gln Asn
370      375      380
Gln Glu Tyr Gln Val Leu Leu Asp Val Lys Ala Arg Leu Glu Asn Glu
385      390      395      400
Ile Ala Thr Tyr Arg Asn Leu Thr Pro Leu Gln Ser Leu Phe His Ala
405      410      415
Cys Leu Leu Tyr Phe Leu Ser Lys Leu Trp Pro Cys His Arg Trp Val
420      425      430
Ser Leu Trp Pro Trp Ser Gln His Gly Glu Met Ile Leu Lys Ala Arg
435      440      445
Val Arg Arg Leu Arg Leu Val Ala Leu Gly Ser Gly Val Pro Ser Pro
450      455      460
Cys Pro Val Phe Leu Gln Asp
465      470

```

<210> 431
 <211> 456
 <212> PRT
 <213> Homo sapiens

<400> 431

```

Met Thr Ser Ser Tyr Ser Ser Ser Ser Cys Pro Leu Gly Cys Thr Met
1      5      10      15
Ala Pro Gly Ala Arg Asn Val Ser Val Ser Pro Ile Asp Ile Gly Cys
20      25      30
Gln Pro Gly Ala Glu Ala Asn Ile Ala Pro Met Cys Leu Leu Ala Asn
35      40      45
Val Ala His Ala Asn Arg Val Arg Val Gly Ser Thr Pro Leu Gly Arg
50      55      60
Pro Ser Leu Cys Leu Pro Pro Thr Cys His Thr Ala Cys Pro Leu Pro
65      70      75      80
Gly Thr Cys His Ile Pro Gly Asn Ile Gly Ile Cys Gly Ala Tyr Gly
85      90      95
Glu Asn Thr Leu Asn Gly His Glu Lys Glu Thr Met Gln Phe Leu Asn
100      105      110
Asp Arg Leu Ala Asn Tyr Leu Glu Lys Val Arg Gln Leu Glu Gln Glu
115      120      125
Asn Ala Glu Leu Glu Ala Thr Leu Leu Glu Arg Ser Lys Cys His Glu
130      135      140
Ser Thr Val Cys Pro Asp Tyr Gln Ser Tyr Phe His Thr Ile Glu Glu
145      150      155      160
Leu Gln Gln Lys Ile Leu Cys Ser Lys Ala Glu Asn Ala Arg Leu Ile
165      170      175
Val Gln Ile Asp Asn Ala Lys Leu Ala Ala Asp Asp Phe Arg Ile Lys
180      185      190
Leu Glu Ser Glu Arg Ser Leu Arg Gln Leu Val Glu Ala Asp Lys Cys
195      200      205
Gly Thr Gln Lys Leu Leu Asp Ala Thr Leu Ala Lys Ala Asp Leu
210      215      220
Glu Ala Gln Gln Glu Ser Leu Lys Glu Glu Gln Leu Ser Leu Lys Ser
225      230      235      240
Asn His Glu Gln Glu Val Lys Ile Leu Arg Ser Gln Leu Gly Glu Lys
245      250      255
Leu Arg Ile Glu Leu Asp Ile Glu Pro Thr Ile Asp Leu Asn Arg Val
260      265      270
Leu Gly Glu Met Arg Ala Gln Tyr Glu Ala Met Leu Glu Thr Asn Arg
275      280      285
Gln Asp Val Glu Gln Trp Phe Gln Ala Gln Ser Glu Gly Ile Ser Leu
290      295      300
Gln Asp Met Ser Cys Ser Glu Glu Leu Gln Cys Cys Gln Ser Glu Ile
305      310      315      320
Leu Glu Leu Arg Cys Thr Val Asn Ala Leu Glu Val Glu Arg Gln Ala
325      330      335
Gln His Thr Leu Lys Asp Cys Leu Gln Asn Ser Leu Cys Glu Ala Glu
340      345      350
Asp Arg Phe Gly Thr Glu Leu Ala Gln Met Gln Ser Leu Ile Ser Asn
355      360      365
Val Glu Glu Gln Leu Ser Glu Ile Arg Ala Asp Leu Glu Arg Gln Asn
370      375      380
Gln Glu Tyr Gln Val Leu Leu Asp Val Lys Thr Arg Leu Glu Asn Glu
385      390      395      400
Ile Ala Thr Tyr Arg Asn Leu Leu Glu Ser Glu Asp Cys Lys Leu Pro
405      410      415
Cys Asn Pro Cys Ser Thr Ser Pro Ser Cys Val Thr Ala Pro Cys Ala
420      425      430

```

Pro Arg Pro Ser Cys Gly Pro Cys Thr Thr Cys Gly Pro Thr Cys Gly
 435 440 445
 Ala Ser Thr Thr Gly Ser Arg Phe
 450 455
 <210> 432
 <211> 448
 <212> . PRT
 <213> Homo sapiens

<400> 432
 Met Thr Ser Ser Cys Cys Val Thr Asn Asn Leu Gln Ala Ser Leu Lys
 1 5 10 15
 Ser Cys Pro Arg Pro Ala Ser Val Cys Ser Ser Gly Val Asn Cys Arg
 20 25 30
 Pro Glu Leu Cys Leu Gly Tyr Val Cys Gln Pro Met Ala Cys Leu Pro
 35 40 45
 Ser Val Cys Leu Pro Thr Thr Phe Arg Pro Ala Ser Cys Leu Ser Lys
 50 55 60
 Thr Tyr Leu Ser Ser Ser Cys Gln Ala Ala Ser Gly Ile Ser Gly Ser
 65 70 75 80
 Met Gly Pro Gly Ser Trp Tyr Ser Glu Gly Ala Phe Asn Gly Asn Glu
 85 90 95
 Lys Glu Thr Met Gln Phe Leu Asn Asp Arg Leu Ala Ser Tyr Leu Thr
 100 105 110
 Arg Val Arg Gln Leu Glu Gln Glu Asn Ala Glu Leu Glu Ser Arg Ile
 115 120 125
 Gln Glu Ala Ser His Ser Gln Val Leu Thr Met Thr Pro Asp Tyr Gln
 130 135 140
 Ser His Phe Arg Thr Ile Glu Leu Gln Gln Lys Ile Leu Cys Thr
 145 150 155 160
 Lys Ala Glu Asn Ala Arg Met Val Val Asn Ile Asp Asn Ala Lys Leu
 165 170 175
 Ala Ala Asp Asp Phe Arg Ala Lys Tyr Glu Ala Glu Leu Ala Met Arg
 180 185 190
 Gln Leu Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Ile Leu Asp Asp
 195 200 205
 Leu Thr Leu Cys Lys Ala Asp Leu Glu Ala Gln Val Glu Ser Leu Lys
 210 215 220
 Glu Glu Leu Met Cys Leu Lys Lys Asn His Glu Glu Glu Val Gly Ser
 225 230 235 240
 Leu Arg Cys Gln Leu Gly Asp Arg Leu Asn Ile Glu Val Asp Ala Ala
 245 250 255
 Pro Pro Val Asp Leu Thr Arg Val Leu Glu Glu Met Arg Cys Gln Tyr
 260 265 270
 Glu Ala Met Val Glu Ala Asn Arg Arg Asp Val Glu Glu Trp Phe Asn
 275 280 285
 Met Gln Met Glu Glu Leu Asn Gln Gln Val Ala Thr Ser Ser Glu Gln
 290 295 300
 Leu Gln Asn Tyr Gln Ser Asp Ile Ile Asp Leu Arg Arg Thr Val Asn
 305 310 315 320
 Thr Leu Glu Ile Glu Leu Gln Ala Gln His Ser Leu Arg Asp Ser Leu
 325 330 335
 Glu Asn Thr Leu Thr Glu Ser Glu Ala Arg Tyr Ser Ser Gln Leu Ala
 340 345 350
 Gln Met Gln Cys Met Ile Thr Asn Val Glu Ala Gln Leu Ala Glu Ile
 355 360 365
 Arg Ala Asp Leu Glu Arg Gln Asn Gln Glu Tyr Gln Val Leu Leu Asp
 370 375 380
 Val Arg Ala Arg Leu Glu Gly Glu Ile Asn Thr Tyr Arg Ser Leu Leu
 385 390 395 400

<400>	433															
Met	Tyr	Ser	Ser	Ser	Ser	Cys	Lys	Leu	Pro	Ser	Leu	Ser	Pro	Val	Ala	
1			5					10						15		
Arg	Ser	Phe	Ser	Ala	Cys	Ser	Val	Gly	Leu	Gly	Arg	Ser	Ser	Tyr	Arg	
			20					25					30			
Ala	Thr	Ser	Cys	Leu	Pro	Ala	Leu	Cys	Leu	Pro	Ala	Gly	Gly	Phe	Ala	
			35				40					45				
Thr	Ser	Tyr	Ser	Gly	Gly	Gly	Gly	Trp	Phe	Gly	Glu	Gly	Ile	Leu	Thr	
	50					55					60					
Gly	Asn	Glu	Lys	Glu	Thr	Met	Gln	Ser	Leu	Asn	Asp	Arg	Leu	Ala	Gly	
65					70					75					80	
Tyr	Leu	Glu	Lys	Val	Arg	Gln	Leu	Glu	Gln	Glu	Asn	Ala	Ser	Leu	Glu	
				85					90					95		
Ser	Arg	Ile	Arg	Glu	Trp	Cys	Glu	Gln	Gln	Val	Pro	Tyr	Met	Cys	Pro	
			100					105					110			
Asp	Tyr	Gln	Ser	Tyr	Phe	Arg	Thr	Ile	Glu	Glu	Leu	Gln	Lys	Lys	Thr	
			115				120					125				
Leu	Cys	Ser	Lys	Ala	Glu	Asn	Ala	Arg	Leu	Val	Val	Glu	Ile	Asp	Asn	
	130					135					140					
Ala	Lys	Leu	Ala	Ala	Asp	Asp	Phe	Arg	Thr	Lys	Tyr	Glu	Thr	Glu	Val	
145					150					155					160	
Ser	Leu	Arg	Gln	Leu	Val	Glu	Ser	Asp	Ile	Asn	Gly	Leu	Arg	Arg	Ile	
				165				170					175			
Leu	Asp	Asp	Leu	Thr	Leu	Cys	Lys	Ser	Asp	Leu	Glu	Ala	Gln	Val	Glu	
			180					185					190			
Ser	Leu	Lys	Glu	Glu	Leu	Leu	Cys	Leu	Lys	Lys	Asn	His	Glu	Glu	Glu	
			195				200				205					
Val	Asn	Ser	Leu	Arg	Cys	Gln	Leu	Gly	Asp	Arg	Leu	Asn	Val	Glu	Val	
	210					215					220					
Asp	Ala	Ala	Pro	Pro	Val	Asp	Leu	Asn	Arg	Val	Leu	Glu	Glu	Met	Arg	
225					230				235					240		
Cys	Gln	Tyr	Glu	Thr	Leu	Val	Glu	Asn	Asn	Arg	Arg	Asp	Ala	Glu	Asp	
				245				250					255			
Trp	Leu	Asp	Thr	Gln	Ser	Glu	Glu	Leu	Asn	Gln	Gln	Val	Val	Ser	Ser	
			260					265					270			
Ser	Glu	Gln	Leu	Gln	Ser	Cys	Gln	Ala	Glu	Ile	Ile	Glu	Leu	Arg	Arg	
			275				280					285				
Thr	Val	Asn	Ala	Leu	Glu	Ile	Glu	Leu	Gln	Ala	Gln	His	Ser	Met	Arg	
	290					295					300					
Asp	Ala	Leu	Glu	Ser	Thr	Leu	Ala	Glu	Thr	Glu	Ala	Arg	Tyr	Ser	Ser	
305					310					315					320	
Gln	Leu	Ala	Gln	Met	Gln	Cys	Met	Ile	Thr	Asn	Val	Glu	Ala	Gln	Leu	

Pro Asp Tyr Ser Pro Ser Lys Ser Cys Leu Pro Cys Leu Pro Ala Ala
 385 390 395 400
 Ser Cys Gly Pro Ser Ala Ala Arg Thr Asn Cys Ser Pro Arg Pro Ile
 405 410 415
 Cys Val Pro Cys Pro Gly Gly Arg Phe
 420 425
 <210> 434
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 434
 Met Ala Thr Gln Thr Cys Thr Pro Thr Phe Ser Thr Gly Ser Ile Lys
 1 5 10 15
 Gly Leu Cys Gly Thr Ala Gly Gly Ile Ser Arg Val Ser Ser Ile Arg
 20 25 30
 Ser Val Gly Ser Cys Arg Val Pro Ser Leu Ala Gly Ala Ala Gly Tyr
 35 40 45
 Ile Ser Ser Ala Arg Ser Gly Leu Ser Gly Leu Gly Ser Cys Leu Pro
 50 55 60
 Gly Ser Tyr Leu Ser Ser Glu Cys His Thr Ser Gly Phe Val Gly Ser
 65 70 75 80
 Gly Gly Trp Phe Cys Glu Gly Ser Phe Asn Gly Ser Glu Lys Glu Thr
 85 90 95
 Met Gln Phe Leu Asn Asp Arg Leu Ala Asn Tyr Leu Glu Lys Val Arg
 100 105 110
 Gln Leu Glu Arg Glu Asn Ala Glu Leu Glu Ser Arg Ile Gln Glu Trp
 115 120 125
 Tyr Glu Phe Gln Ile Pro Tyr Ile Cys Pro Asp Tyr Gln Ser Tyr Phe
 130 135 140
 Lys Thr Ile Glu Asp Phe Gln Gln Lys Ile Leu Leu Thr Lys Ser Glu
 145 150 155 160
 Asn Ala Arg Leu Val Leu Gln Ile Asp Asn Ala Lys Leu Ala Ala Asp
 165 170 175
 Asp Phe Arg Thr Lys Tyr Glu Thr Glu Leu Ser Leu Arg Gln Leu Val
 180 185 190
 Glu Ala Asp Ile Asn Gly Leu Arg Arg Ile Leu Asp Glu Leu Thr Leu
 195 200 205
 Cys Lys Ala Asp Leu Glu Ala Gln Val Glu Ser Leu Lys Glu Glu Leu
 210 215 220
 Met Cys Leu Lys Lys Asn His Glu Glu Glu Val Ser Val Leu Arg Cys
 225 230 235 240
 Gln Leu Gly Asp Arg Leu Asn Val Glu Val Asp Ala Ala Pro Pro Val
 245 250 255
 Asp Leu Asn Lys Ile Leu Glu Asp Met Arg Cys Gln Tyr Glu Ala Leu
 260 265 270
 Val Glu Asn Asn Arg Arg Asp Val Glu Ala Trp Phe Asn Thr Gln Thr
 275 280 285
 Glu Glu Leu Asn Gln Gln Val Val Ser Ser Ser Glu Gln Leu Gln Cys
 290 295 300
 Cys Gln Thr Glu Ile Ile Glu Leu Arg Arg Thr Val Asn Ala Leu Glu
 305 310 315 320
 Ile Glu Leu Gln Ala Gln His Ser Met Arg Asn Ser Leu Glu Ser Thr
 325 330 335
 Leu Ala Glu Thr Glu Ala Arg Tyr Ser Ser Gln Leu Ala Gln Met Gln
 340 345 350
 Cys Leu Ile Ser Asn Val Glu Ala Gln Leu Ser Glu Ile Arg Cys Asp
 355 360 365
 Leu Glu Arg Gln Asn Gln Glu Tyr Gln Val Leu Leu Asp Val Lys Ala
 370 375 380

Arg Leu Glu Gly Glu Ile Ala Thr Tyr Arg His Leu Leu Glu Gly Glu
 385 390 395 400
 Asp Cys Lys Leu Pro Gln Pro Cys Ala Thr Ala Cys Lys Pro Val
 405 410 415
 Ile Arg Val Pro Ser Val Pro Pro Val Pro Cys Val Pro Ser Val Pro
 420 425 430
 Cys Thr Pro Ala Pro Gln Val Gly Thr Gln Ile Arg Thr Ile Thr Glu
 435 440 445
 Glu Ile Arg Asp Gly Lys Val Ile Ser Ser Arg Glu His Val Gln Ser
 450 455 460
 Arg Pro Leu
 465
 <210> 435
 <211> 420
 <212> PRT
 <213> Homo sapiens

<400> 435
 Met Ser Leu Arg Leu Gln Ser Ser Ser Ala Ser Tyr Gly Gly Gly Phe
 1 5 10 15
 Gly Gly Gly Ser Cys Gln Leu Gly Gly Gly Arg Gly Val Ser Thr Cys
 20 25 30
 Ser Thr Arg Phe Val Ser Gly Gly Ser Ala Gly Gly Tyr Gly Gly Gly
 35 40 45
 Val Ser Cys Gly Phe Gly Gly Gly Ala Gly Ser Gly Phe Gly Gly Gly
 50 55 60
 Tyr Gly Gly Gly Leu Gly Gly Gly Tyr Gly Gly Leu Gly Gly Gly
 65 70 75 80
 Phe Gly Gly Gly Phe Ala Gly Gly Phe Val Asp Phe Gly Ala Cys Asp
 85 90 95
 Gly Gly Leu Leu Thr Gly Asn Glu Lys Ile Thr Met Gln Asn Leu Asn
 100 105 110
 Asp Arg Leu Ala Ser Tyr Leu Glu Lys Val Arg Ala Leu Glu Glu Ala
 115 120 125
 Asn Ala Asp Leu Glu Val Lys Ile Arg Asp Trp His Leu Lys Gln Ser
 130 135 140
 Pro Ala Ser Pro Glu Arg Asp Tyr Ser Pro Tyr Tyr Lys Thr Ile Glu
 145 150 155 160
 Glu Leu Arg Asp Lys Ile Leu Thr Ala Thr Ile Glu Asn Asn Arg Val
 165 170 175
 Ile Leu Glu Ile Asp Asn Ala Arg Leu Ala Val Asp Asp Phe Arg Leu
 180 185 190
 Lys Tyr Glu Asn Glu Leu Ala Leu Arg Gln Ser Val Glu Ala Asp Ile
 195 200 205
 Asn Gly Leu Arg Arg Val Leu Asp Glu Leu Thr Leu Ser Lys Thr Asp
 210 215 220
 Leu Glu Met Gln Ile Glu Ser Leu Asn Glu Glu Leu Ala Tyr Met Lys
 225 230 235 240
 Lys Asn His Glu Glu Glu Met Lys Glu Phe Ser Asn Gln Val Val Gly
 245 250 255
 Gln Val Asn Val Glu Met Asp Ala Thr Pro Gly Ile Asp Leu Thr Arg
 260 265 270
 Val Leu Ala Glu Met Arg Glu Gln Tyr Glu Ala Met Ala Glu Arg Asn
 275 280 285
 Arg Arg Asp Ala Glu Glu Trp Phe His Ala Lys Ser Ala Glu Leu Asn
 290 295 300
 Lys Glu Val Ser Thr Asn Thr Ala Met Ile Gln Thr Ser Lys Thr Glu
 305 310 315 320
 Ile Thr Glu Leu Arg Arg Thr Leu Gln Gly Leu Glu Ile Glu Leu Gln
 325 330 335

Ser Gln Leu Ser Met Lys Ala Gly Leu Glu Asn Thr Val Ala Glu Thr
 340 345 350
 Glu Cys Arg Tyr Ala Leu Gln Leu Gln Gln Ile Gln Gly Leu Ile Ser
 355 360 365
 Ser Ile Glu Ala Gln Leu Ser Glu Leu Arg Ser Glu Met Glu Cys Gln
 370 375 380
 Asn Gln Glu Tyr Lys Met Leu Leu Asp Ile Lys Thr Arg Leu Glu Gln
 385 390 395 400
 Glu Ile Ala Thr Tyr Arg Ser Leu Leu Glu Gly Gln Asp Ala Lys Lys
 405 410 415
 Arg Gln Pro Pro
 420

<210> 436

<211> 456

<212> PRT

<213> Homo sapiens

<400> 436
 Met Thr Thr Thr Phe Leu Gln Thr Ser Ser Ser Thr Phe Gly Gly Gly
 1 5 10 15
 Ser Thr Arg Gly Gly Ser Leu Leu Ala Gly Gly Gly Gly Phe Gly Gly
 20 25 30
 Gly Ser Leu Ser Gly Gly Gly Gly Ser Arg Ser Ile Ser Ala Ser Ser
 35 40 45
 Ala Arg Phe Val Ser Ser Gly Ser Gly Gly Gly Tyr Gly Gly Gly Met
 50 55 60
 Arg Val Cys Gly Phe Gly Gly Gly Ala Gly Ser Val Phe Gly Gly Gly
 65 70 75 80
 Phe Gly Gly Gly Val Gly Gly Gly Phe Gly Gly Gly Phe Gly Gly Gly
 85 90 95
 Asp Gly Gly Leu Leu Ser Gly Asn Glu Lys Ile Thr Met Gln Asn Leu
 100 105 110
 Asn Asp Arg Leu Ala Ser Tyr Leu Asp Lys Val Arg Ala Leu Glu Glu
 115 120 125
 Ala Asn Ala Asp Leu Glu Val Lys Ile His Asp Trp Tyr Gln Lys Gln
 130 135 140
 Thr Pro Thr Ser Pro Glu Cys Asp Tyr Ser Gln Tyr Phe Lys Thr Ile
 145 150 155 160
 Glu Glu Leu Arg Asp Lys Ile Met Ala Thr Thr Ile Asp Asn Ser Arg
 165 170 175
 Val Ile Leu Glu Ile Asp Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg
 180 185 190
 Leu Lys Tyr Glu Asn Glu Leu Ala Leu Arg Gln Gly Val Glu Ala Asp
 195 200 205
 Ile Asn Gly Leu Arg Arg Val Leu Asp Glu Leu Thr Leu Ala Arg Thr
 210 215 220
 Asp Leu Glu Met Gln Ile Glu Gly Leu Asn Glu Glu Leu Ala Tyr Leu
 225 230 235 240
 Lys Lys Asn His Glu Glu Glu Met Lys Glu Phe Ser Ser Gln Leu Ala
 245 250 255
 Gly Gln Val Asn Val Glu Met Asp Ala Ala Pro Gly Val Asp Leu Thr
 260 265 270
 Arg Val Leu Ala Glu Met Arg Glu Gln Tyr Glu Ala Met Ala Glu Lys
 275 280 285
 Asn Arg Arg Asp Val Glu Ala Trp Phe Phe Ser Lys Thr Glu Glu Leu
 290 295 300
 Asn Lys Glu Val Ala Ser Asn Thr Glu Met Ile Gln Thr Ser Lys Thr
 305 310 315 320
 Glu Ile Thr Asp Leu Arg Arg Thr Met Gln Glu Leu Glu Ile Glu Leu
 325 330 335

Gln Ser Gln Leu Ser Met Lys Ala Gly Leu Glu Asn Ser Leu Ala Glu
 340 345 350
 Thr Glu Cys Arg Tyr Ala Thr Gln Leu Gln Ile Gln Gly Leu Ile
 355 360 365
 Gly Gly Leu Glu Ala Gln Leu Ser Glu Leu Arg Cys Glu Met Glu Ala
 370 375 380
 Gln Asn Gln Glu Tyr Lys Met Leu Leu Asp Ile Lys Thr Arg Leu Glu
 385 390 395 400
 Gln Glu Ile Ala Thr Tyr Arg Ser Leu Leu Glu Gly Gln Asp Ala Lys
 405 410 415
 Met Ala Gly Ile Gly Ile Arg Glu Ala Ser Ser Gly Gly Gly Gly Ser
 420 425 430
 Ser Ser Asn Phe His Ile Asn Val Glu Glu Ser Val Asp Gly Gln Val
 435 440 445
 Val Ser Ser His Lys Arg Glu Ile
 450 455
 <210> 437
 <211> 400
 <212> PRT
 <213> Homo sapiens

<400> 437
 Met Thr Ser Tyr Ser Tyr Arg Gln Ser Ser Ala Thr Ser Ser Phe Gly
 1 5 10 15
 Gly Leu Gly Gly Gly Ser Val Arg Phe Gly Pro Gly Val Ala Phe Arg
 20 25 30
 Ala Pro Ser Ile His Gly Gly Ser Gly Gly Arg Gly Val Ser Val Ser
 35 40 45
 Ser Ala Arg Phe Val Ser Ser Ser Ser Gly Ala Tyr Gly Gly Gly
 50 55 60
 Tyr Gly Gly Val Leu Thr Ala Ser Asp Gly Leu Leu Ala Gly Asn Glu
 65 70 75 80
 Lys Leu Thr Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp
 85 90 95
 Lys Val Arg Ala Leu Glu Ala Ala Asn Gly Glu Leu Glu Val Lys Ile
 100 105 110
 Arg Asp Trp Tyr Gln Lys Gln Gly Pro Gly Pro Ser Arg Asp Tyr Ser
 115 120 125
 His Tyr Tyr Thr Thr Ile Gln Asp Leu Arg Asp Lys Ile Leu Gly Ala
 130 135 140
 Thr Ile Glu Asn Ser Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu
 145 150 155 160
 Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln Ala Leu Arg
 165 170 175
 Met Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val Leu Asp Glu
 180 185 190
 Leu Thr Leu Ala Arg Thr Asp Leu Glu Met Gln Ile Glu Gly Leu Lys
 195 200 205
 Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu Ile Ser Thr
 210 215 220
 Leu Arg Gly Gln Val Gly Gly Gln Val Ser Val Glu Val Asp Ser Ala
 225 230 235 240
 Pro Gly Thr Asp Leu Ala Lys Ile Leu Ser Asp Met Arg Ser Gln Tyr
 245 250 255
 Glu Val Met Ala Glu Gln Asn Arg Lys Asp Ala Glu Ala Trp Phe Thr
 260 265 270
 Ser Arg Thr Glu Glu Leu Asn Arg Glu Val Ala Gly His Thr Glu Gln
 275 280 285
 Leu Gln Met Ser Arg Ser Glu Val Thr Asp Leu Arg Arg Thr Leu Gln
 290 295 300

Gly Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser Met Lys Ala Ala Leu
 305 310 315 320
 Glu Asp Thr Leu Ala Glu Thr Glu Ala Arg Phe Gly Ala Gln Leu Ala
 325 330 335
 His Ile Gln Ala Leu Ile Ser Gly Ile Glu Ala Gln Leu Gly Asp Val
 340 345 350
 Arg Ala Asp Ser Glu Arg Gln Asn Gln Glu Tyr Gln Arg Leu Met Asp
 355 360 365
 Ile Lys Ser Arg Leu Glu Gln Glu Ile Ala Thr Tyr Arg Ser Leu Leu
 370 375 380
 Glu Gly Gln Glu Asp His Tyr Asn Asn Leu Ser Ala Ser Lys Val Leu
 385 390 395 400
 <210> 438

<211> 622

<212> PRT

<213> Homo sapiens

<400> 438

Met Ser Cys Arg Gln Phe Ser Ser Ser Tyr Leu Thr Ser Gly Gly Gly
 1 5 10 15
 Gly Gly Gly Gly Leu Gly Ser Gly Gly Ser Ile Arg Ser Ser Tyr Ser
 20 25 30
 Arg Phe Ser Ser Ser Gly Gly Arg Gly Gly Gly Arg Phe Ser Ser
 35 40 45
 Ser Ser Gly Tyr Gly Gly Gly Ser Ser Arg Val Cys Gly Arg Gly Gly
 50 55 60
 Gly Gly Ser Phe Gly Tyr Ser Tyr Gly Gly Gly Ser Gly Gly Gly Phe
 65 70 75 80
 Ser Ala Ser Ser Leu Gly Gly Gly Phe Gly Gly Ser Arg Gly Phe
 85 90 95
 Gly Gly Ala Ser Gly Gly Gly Tyr Ser Ser Ser Gly Gly Phe Gly Gly
 100 105 110
 Gly Phe Gly Gly Gly Ser Gly Gly Gly Phe Gly Gly Gly Tyr Gly Ser
 115 120 125
 Gly Phe Gly Gly Leu Gly Gly Phe Gly Gly Gly Ala Gly Gly Gly Asp
 130 135 140
 Gly Gly Ile Leu Thr Ala Asn Glu Lys Ser Thr Met Gln Glu Leu Asn
 145 150 155 160
 Ser Arg Leu Ala Ser Tyr Leu Asp Lys Val Gln Ala Leu Glu Glu Ala
 165 170 175
 Asn Asn Asp Leu Glu Asn Lys Ile Gln Asp Trp Tyr Asp Lys Lys Gly
 180 185 190
 Pro Ala Ala Ile Gln Lys Asn Tyr Ser Pro Tyr Tyr Asn Thr Ile Asp
 195 200 205
 Asp Leu Lys Asp Gln Ile Val Asp Leu Thr Val Gly Asn Asn Lys Thr
 210 215 220
 Leu Leu Asp Ile Asp Asn Thr Arg Met Thr Leu Asp Asp Phe Arg Ile
 225 230 235 240
 Lys Phe Glu Met Glu Gln Asn Leu Arg Gln Gly Val Asp Ala Asp Ile
 245 250 255
 Asn Gly Leu Arg Gln Val Leu Asp Asn Leu Thr Met Glu Lys Ser Asp
 260 265 270
 Leu Glu Met Gln Tyr Glu Thr Leu Gln Glu Glu Leu Met Ala Leu Lys
 275 280 285
 Lys Asn His Lys Glu Glu Met Ser Gln Leu Thr Gly Gln Asn Ser Gly
 290 295 300
 Asp Val Asn Val Glu Ile Asn Val Ala Pro Gly Lys Asp Leu Thr Lys
 305 310 315 320
 Thr Leu Asn Asp Met Arg Gln Glu Tyr Glu Gln Leu Ile Ala Lys Asn
 325 330 335

<400>	439															
Met	Thr	Thr	Cys	Ser	Arg	Gln	Phe	Thr	Ser	Ser	Ser	Ser	Met	Lys	Gly	
1				5					10					15		
Ser	Cys	Gly	Ile	Gly	Gly	Gly	Ile	Gly	Gly	Gly	Ser	Ser	Arg	Ile	Ser	
			20					25					30			
Ser	Val	Leu	Ala	Gly	Gly	Ser	Cys	Arg	Ala	Pro	Ser	Thr	Tyr	Gly	Gly	
		35					40					45				
Gly	Leu	Ser	Val	Ser	Ser	Ser	Arg	Phe	Ser	Ser	Gly	Gly	Ala	Tyr	Gly	
	50					55					60					
Leu	Gly	Gly	Gly	Tyr	Gly	Gly	Gly	Phe	Ser	Ser	Ser	Ser	Ser	Ser	Phe	
65				70						75					80	
Gly	Ser	Gly	Phe	Gly	Gly	Gly	Tyr	Gly	Gly	Gly	Leu	Gly	Ala	Gly	Leu	
			85						90					95		
Gly	Gly	Gly	Phe	Gly	Gly	Gly	Phe	Ala	Gly	Gly	Asp	Gly	Leu	Leu	Val	
			100					105					110			
Gly	Ser	Glu	Lys	Val	Thr	Met	Gln	Asn	Leu	Asn	Asp	Arg	Leu	Ala	Ser	
		115					120					125				
Tyr	Leu	Asp	Lys	Val	Arg	Ala	Leu	Glu	Glu	Ala	Asn	Ala	Asp	Leu	Glu	
	130					135					140					

Val Lys Ile Arg Asp Trp Tyr Gln Arg Gln Arg Pro Ala Glu Ile Lys
 145 150 155 160
 Asp Tyr Ser Pro Tyr Phe Lys Thr Ile Glu Asp Leu Arg Asn Lys Ile
 165 170 175
 Leu Thr Ala Thr Val Asp Asn Ala Asn Val Leu Leu Gln Ile Asp Asn
 180 185 190
 Ala Arg Leu Ala Ala Asp Asp Phe Arg Thr Lys Tyr Glu Thr Glu Leu
 195 200 205
 Asn Leu Arg Met Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val
 210 215 220
 Leu Asp Glu Leu Thr Leu Ala Arg Ala Asp Leu Glu Met Gln Ile Glu
 225 230 235 240
 Ser Leu Lys Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu Glu
 245 250 255
 Met Asn Ala Leu Arg Gly Gln Val Gly Gly Asp Val Asn Val Glu Met
 260 265 270
 Asp Ala Ala Pro Gly Val Asp Leu Ser Arg Ile Leu Asn Glu Met Arg
 275 280 285
 Asp Gln Tyr Glu Lys Met Ala Glu Lys Asn Arg Lys Asp Ala Glu Glu
 290 295 300
 Trp Phe Phe Thr Lys Thr Glu Glu Leu Asn Arg Glu Val Ala Thr Asn
 305 310 315 320
 Ser Glu Leu Val Gln Ser Gly Lys Ser Glu Ile Ser Glu Leu Arg Arg
 325 330 335
 Thr Met Gln Asn Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser Met Lys
 340 345 350
 Ala Ser Leu Glu Asn Ser Leu Glu Glu Thr Lys Gly Arg Tyr Cys Met
 355 360 365
 Gln Leu Ala Gln Ile Gln Glu Met Ile Gly Ser Val Glu Glu Gln Leu
 370 375 380
 Ala Gln Leu Arg Cys Glu Met Glu Gln Gln Asn Gln Glu Tyr Lys Ile
 385 390 395 400
 Leu Leu Asp Val Lys Thr Arg Leu Glu Gln Glu Ile Ala Thr Tyr Arg
 405 410 415
 Arg Leu Leu Glu Gly Glu Asp Ala His Leu Ser Ser Ser Gln Phe Ser
 420 425 430
 Ser Gly Ser Gln Ser Ser Arg Asp Val Thr Ser Ser Ser Arg Gln Ile
 435 440 445
 Arg Thr Lys Val Met Asp Val His Asp Gly Lys Val Val Ser Thr His
 450 455 460
 Glu Gln Val Leu Arg Thr Lys Asn
 465 470
 <210> 440
 <211> 473
 <212> PRT
 <213> Homo sapiens

<400> 440
 Met Thr Thr Cys Ser Arg Gln Phe Thr Ser Ser Ser Ser Met Lys Gly
 1 5 10 15
 Ser Cys Gly Ile Gly Gly Gly Ile Gly Gly Gly Ser Ser Arg Ile Ser
 20 25 30
 Ser Val Leu Ala Gly Gly Ser Cys Arg Ala Pro Ser Thr Tyr Gly Gly
 35 40 45
 Gly Leu Ser Val Ser Ser Arg Phe Ser Ser Gly Gly Ala Cys Gly Leu
 50 55 60
 Gly Gly Gly Tyr Gly Gly Gly Phe Ser Ser Ser Ser Phe Gly Ser
 65 70 75 80
 Gly Phe Gly Gly Gly Tyr Gly Gly Gly Leu Gly Ala Gly Phe Gly Gly
 85 90 95

Gly Leu Gly Ala Gly Phe Gly Gly Gly Phe Ala Gly Gly Asp Gly Leu
 100 105 110
 Leu Val Gly Ser Glu Lys Val Thr Met Gln Asn Leu Asn Asp Arg Leu
 115 120 125
 Ala Ser Tyr Leu Asp Lys Val Arg Ala Leu Glu Glu Ala Asn Ala Asp
 130 135 140
 Leu Glu Val Lys Ile Arg Asp Trp Tyr Gln Arg Gln Arg Pro Ser Glu
 145 150 155 160
 Ile Lys Asp Tyr Ser Pro Tyr Phe Lys Thr Ile Glu Asp Leu Arg Asn
 165 170 175
 Lys Ile Ile Ala Ala Thr Ile Glu Asn Ala Gln Pro Ile Leu Gln Ile
 180 185 190
 Asp Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Thr Lys Tyr Glu His
 195 200 205
 Glu Leu Ala Leu Arg Gln Thr Val Glu Ala Asp Val Asn Gly Leu Arg
 210 215 220
 Arg Val Leu Asp Glu Leu Thr Leu Ala Arg Thr Asp Leu Glu Met Gln
 225 230 235 240
 Ile Glu Gly Leu Lys Glu Glu Leu Ala Tyr Leu Arg Lys Asn His Glu
 245 250 255
 Glu Glu Met Leu Ala Leu Arg Gly Gln Thr Gly Gly Asp Val Asn Val
 260 265 270
 Glu Met Asp Ala Ala Pro Gly Val Asp Leu Ser Arg Ile Leu Asn Glu
 275 280 285
 Met Arg Asp Gln Tyr Glu Gln Met Ala Glu Lys Asn Arg Arg Asp Ala
 290 295 300
 Glu Thr Trp Phe Leu Ser Lys Thr Glu Glu Leu Asn Lys Glu Val Ala
 305 310 315 320
 Ser Asn Ser Glu Leu Val Gln Ser Ser Arg Ser Glu Val Thr Glu Leu
 325 330 335
 Arg Arg Val Leu Gln Gly Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser
 340 345 350
 Met Lys Ala Ser Leu Glu Asn Ser Leu Glu Glu Thr Lys Gly Arg Tyr
 355 360 365
 Cys Met Gln Leu Ser Gln Ile Gln Gly Leu Ile Gly Ser Val Glu Glu
 370 375 380
 Gln Leu Ala Gln Leu Arg Cys Glu Met Glu Gln Gln Ser Gln Glu Tyr
 385 390 395 400
 Gln Ile Leu Leu Asp Val Lys Thr Arg Leu Glu Gln Glu Ile Ala Thr
 405 410 415
 Tyr Arg Arg Leu Leu Glu Gly Glu Asp Ala His Leu Ser Ser Gln Gln
 420 425 430
 Ala Ser Gly Gln Ser Tyr Ser Ser Arg Glu Val Phe Thr Ser Ser Ser
 435 440 445
 Ser Ser Ser Ser Arg Gln Thr Arg Pro Ile Leu Lys Glu Gln Ser Ser
 450 455 460
 Ser Ser Phe Ser Gln Gly Gln Ser Ser
 465 470
 <210> 441
 <211> 432
 <212> PRT
 <213> Homo sapiens
 <400> 441
 Met Thr Thr Ser Ile Arg Gln Phe Thr Ser Ser Ser Ser Ile Lys Gly
 1 5 10 15
 Ser Ser Gly Leu Gly Gly Gly Ser Ser Arg Thr Ser Cys Arg Leu Ser
 20 25 30
 Gly Gly Leu Gly Ala Gly Ser Cys Arg Leu Gly Ser Ala Gly Gly Leu
 35 40 45

Gly Ser Thr Leu Gly Gly Ser Ser Tyr Ser Ser Cys Tyr Ser Phe Gly
 50 55 60
 Ser Gly Gly Gly Tyr Gly Ser Ser Phe Gly Gly Val Asp Gly Leu Leu
 65 70 75 80
 Ala Gly Gly Glu Lys Ala Thr Met Gln Asn Leu Asn Asp Arg Leu Ala
 85 90 95
 Ser Tyr Leu Asp Lys Val Arg Ala Leu Glu Glu Ala Asn Thr Glu Leu
 100 105 110
 Glu Val Lys Ile Arg Asp Trp Tyr Gln Arg Gln Ala Pro Gly Pro Ala
 115 120 125
 Arg Asp Tyr Ser Gln Tyr Tyr Arg Thr Ile Glu Glu Leu Gln Asn Lys
 130 135 140
 Ile Leu Thr Ala Thr Val Asp Asn Ala Asn Ile Leu Leu Gln Ile Asp
 145 150 155 160
 Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu
 165 170 175
 Gln Ala Leu Arg Leu Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg
 180 185 190
 Val Leu Asp Glu Leu Thr Leu Ala Arg Ala Asp Leu Glu Met Gln Ile
 195 200 205
 Glu Asn Leu Lys Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu
 210 215 220
 Glu Met Asn Ala Leu Arg Gly Gln Val Gly Gly Glu Ile Asn Val Glu
 225 230 235 240
 Met Asp Ala Ala Pro Gly Val Asp Leu Ser Arg Ile Leu Asn Glu Met
 245 250 255
 Arg Asp Gln Tyr Glu Lys Met Ala Glu Lys Asn Arg Lys Asp Ala Glu
 260 265 270
 Asp Trp Phe Phe Ser Lys Thr Glu Glu Leu Asn Arg Glu Val Ala Thr
 275 280 285
 Asn Ser Glu Leu Val Gln Ser Gly Lys Ser Glu Ile Ser Glu Leu Arg
 290 295 300
 Arg Thr Met Gln Ala Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser Met
 305 310 315 320
 Lys Ala Ser Leu Glu Gly Asn Leu Ala Glu Thr Glu Asn Arg Tyr Cys
 325 330 335
 Val Gln Leu Ser Gln Ile Gln Gly Leu Ile Gly Ser Val Glu Glu Gln
 340 345 350
 Leu Ala Gln Leu Arg Cys Glu Met Glu Gln Gln Asn Gln Glu Tyr Lys
 355 360 365
 Ile Leu Leu Asp Val Lys Thr Arg Leu Glu Gln Glu Ile Ala Thr Tyr
 370 375 380
 Arg Arg Leu Leu Glu Gly Glu Asp Ala His Leu Thr Gln Tyr Lys Lys
 385 390 395 400
 Glu Pro Val Thr Thr Arg Gln Val Arg Thr Ile Val Glu Glu Val Gln
 405 410 415
 Asp Gly Lys Val Ile Ser Ser Arg Glu Gln Val His Gln Thr Thr Arg
 420 425 430
 <210> 442
 <211> 469
 <212> PRT
 <213> Homo sapiens
 <400> 442
 Met Ser Ile His Phe Ser Ser Pro Val Phe Thr Ser Arg Ser Ala Ala
 1 5 10 15
 Phe Ser Gly Arg Gly Ala Gln Val Arg Leu Ser Ser Ala Arg Pro Gly
 20 25 30
 Gly Leu Gly Ser Ser Ser Leu Tyr Gly Leu Gly Ala Ser Arg Pro Arg
 35 40 45

Val Ala Val Arg Ser Ala Tyr Gly Gly Pro Val Gly Ala Gly Ile Arg
 50 55 60
 Glu Val Thr Ile Asn Gln Ser Leu Leu Ala Pro Leu Arg Leu Asp Ala
 65 70 75 80
 Asp Pro Ser Leu Gln Arg Val Arg Gln Glu Glu Ser Glu Gln Ile Lys
 85 90 95
 Thr Leu Asn Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu
 100 105 110
 Glu Gln Gln Asn Lys Leu Leu Glu Thr Lys Trp Thr Leu Leu Gln Glu
 115 120 125
 Gln Lys Ser Ala Lys Ser Ser Arg Leu Pro Asp Ile Phe Glu Ala Gln
 130 135 140
 Ile Ala Gly Leu Arg Gly Gln Leu Glu Ala Leu Gln Val Asp Gly Gly
 145 150 155 160
 Arg Leu Glu Ala Glu Leu Arg Ser Met Gln Asp Val Val Glu Asp Phe
 165 170 175
 Lys Asn Lys Tyr Glu Asp Glu Ile Asn Arg Arg Thr Ala Ala Glu Asn
 180 185 190
 Glu Phe Val Val Leu Lys Lys Asp Val Asp Ala Ala Tyr Met Ser Lys
 195 200 205
 Val Glu Leu Glu Ala Lys Val Asp Ala Leu Asn Asp Glu Ile Asn Phe
 210 215 220
 Leu Arg Thr Leu Asn Glu Thr Glu Leu Thr Glu Leu Gln Ser Gln Ile
 225 230 235 240
 Ser Asp Thr Ser Val Val Leu Ser Met Asp Asn Ser Arg Ser Leu Asp
 245 250 255
 Leu Asp Gly Ile Ile Ala Glu Val Lys Ala Gln Tyr Glu Glu Met Ala
 260 265 270
 Lys Cys Ser Arg Ala Glu Ala Glu Ala Trp Tyr Gln Thr Lys Phe Glu
 275 280 285
 Thr Leu Gln Ala Gln Ala Gly Lys His Gly Asp Asp Leu Arg Asn Thr
 290 295 300
 Arg Asn Glu Ile Ser Glu Met Asn Arg Ala Ile Gln Arg Leu Gln Ala
 305 310 315 320
 Glu Ile Asp Asn Ile Lys Asn Gln Arg Ala Lys Leu Glu Ala Ala Ile
 325 330 335
 Ala Glu Ala Glu Glu Arg Gly Glu Leu Ala Leu Lys Asp Ala Arg Ala
 340 345 350
 Lys Gln Glu Glu Leu Glu Ala Ala Leu Gln Arg Ala Lys Gln Asp Met
 355 360 365
 Ala Arg Gln Leu Arg Glu Tyr Gln Glu Leu Met Ser Val Lys Leu Ala
 370 375 380
 Leu Asp Ile Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu
 385 390 395 400
 Ser Arg Leu Ala Gly Asp Gly Val Gly Ala Val Asn Ile Ser Val Met
 405 410 415
 Asn Ser Thr Gly Gly Ser Ser Ser Gly Gly Gly Ile Gly Leu Thr Leu
 420 425 430
 Gly Gly Thr Met Gly Ser Asn Ala Leu Ser Phe Ser Ser Ala Gly
 435 440 445
 Pro Gly Leu Leu Lys Ala Tyr Ser Ile Arg Thr Ala Ser Ala Ser Arg
 450 455 460
 Arg Ser Ala Arg Asp
 465
 <210> 443
 <211> 486
 <212> PRT
 <213> Homo sapiens

<400> 443
 Met Thr Cys Gly Ser Tyr Cys Gly Gly Arg Ala Phe Ser Cys Ile Ser
 1 5 10 15
 Ala Cys Gly Pro Arg Pro Gly Arg Cys Cys Ile Thr Ala Ala Pro Tyr
 20 25 30
 Arg Gly Ile Ser Cys Tyr Arg Gly Leu Thr Gly Gly Phe Gly Ser His
 35 40 45
 Ser Val Cys Gly Gly Phe Arg Ala Gly Ser Cys Gly Arg Ser Phe Gly
 50 55 60
 Tyr Arg Ser Gly Gly Val Cys Gly Pro Ser Pro Cys Ile Thr Thr
 65 70 75 80
 Val Ser Val Asn Glu Ser Leu Leu Thr Pro Leu Asn Leu Glu Ile Asp
 85 90 95
 Pro Asn Ala Gln Cys Val Lys Gln Glu Lys Glu Gln Ile Lys Ser
 100 105 110
 Leu Asn Ser Arg Phe Ala Ala Phe Ile Asp Lys Val Arg Phe Leu Glu
 115 120 125
 Gln Gln Asn Lys Leu Leu Glu Thr Lys Leu Gln Phe Tyr Gln Asn Arg
 130 135 140
 Glu Cys Cys Gln Ser Asn Leu Glu Pro Leu Phe Glu Gly Tyr Ile Glu
 145 150 155 160
 Thr Leu Arg Arg Glu Ala Glu Cys Val Glu Ala Asp Ser Gly Arg Leu
 165 170 175
 Ala Ser Glu Leu Asn His Val Gln Glu Val Leu Glu Gly Tyr Lys Lys
 180 185 190
 Lys Tyr Glu Glu Glu Val Ser Leu Arg Ala Thr Ala Glu Asn Glu Phe
 195 200 205
 Val Ala Leu Lys Lys Asp Val Asp Cys Ala Tyr Leu Arg Lys Ser Asp
 210 215 220
 Leu Glu Ala Asn Val Glu Ala Leu Ile Gln Glu Ile Asp Phe Leu Arg
 225 230 235 240
 Arg Leu Tyr Glu Glu Glu Ile Arg Val Leu Gln Ser His Ile Ser Asp
 245 250 255
 Thr Ser Val Val Val Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp
 260 265 270
 Cys Ile Ile Ala Glu Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg
 275 280 285
 Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met
 290 295 300
 Lys Ala Thr Val Ile Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu
 305 310 315 320
 Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val
 325 330 335
 Glu Asn Ala Lys Cys Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln
 340 345 350
 Ser Glu Gln Gln Gly Glu Ala Ala Leu Ser Asp Ala Arg Cys Lys Leu
 355 360 365
 Ala Glu Leu Glu Gly Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys
 370 375 380
 Leu Ile Arg Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp
 385 390 395 400
 Ile Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg
 405 410 415
 Leu Cys Glu Gly Val Gly Ser Val Asn Val Cys Val Ser Ser Ser Arg
 420 425 430
 Gly Gly Val Val Cys Gly Asp Leu Cys Ala Ser Thr Thr Ala Pro Val
 435 440 445
 Val Ser Thr Arg Val Ser Ser Val Pro Ser Asn Ser Asn Val Val Val
 450 455 460
 Gly Thr Thr Asn Ala Cys Ala Pro Ser Ala Arg Val Gly Val Cys Gly
 465 470 475 480
 Gly Ser Cys Lys Arg Cys
 485

<210> 444

<211> 111

<212> PRT

<213> Homo sapiens

<400> 444

```

Met Lys Ala Thr Val Ile Trp His Gly Glu Thr Val Gly Cys Thr Lys
1          5          10          15
Glu Glu Ile Lys Glu Leu Thr His Met Ile Gln Arg Leu Met Ala Lys
          20          25          30
Val Glu Asn Ala Lys Cys Gln Val Trp Gly Ile Cys Ala Gln Gly Gln
          35          40          45
Arg Asp Leu Trp Pro Asn Leu Cys His Thr Ala Tyr Val Cys Pro Thr
          50          55          60
Trp Ile Ser Ala Phe Ile Leu Gln Ser Leu Cys Pro Cys Arg Val Pro
          65          70          75          80
Gly Cys Gly Gln Ser Gly Ser Ala Arg Met Met Lys Ala Arg Gly Leu
          85          90          95
Phe Leu Arg Cys Ser Gln Leu Asn Gly Arg Leu Asp Ile Phe Arg
          100          105          110

```

<210> 445

<211> 505

<212> PRT

<213> Homo sapiens

<400> 445

```

Met Thr Cys Gly Ser Gly Phe Gly Gly Arg Ala Phe Ser Cys Ile Ser
1          5          10          15
Ala Cys Gly Pro Arg Pro Gly Arg Cys Cys Ile Thr Ala Ala Pro Tyr
          20          25          30
Arg Gly Ile Ser Cys Tyr Arg Gly Leu Thr Gly Gly Phe Gly Ser His
          35          40          45
Ser Val Cys Gly Gly Phe Arg Ala Gly Ser Cys Gly Arg Ser Phe Gly
          50          55          60
Tyr Arg Ser Gly Gly Val Cys Gly Pro Ser Pro Pro Cys Ile Thr Thr
          65          70          75          80
Val Ser Val Asn Glu Ser Leu Leu Thr Pro Leu Asn Leu Glu Ile Asp
          85          90          95
Pro Asn Ala Gln Cys Val Lys Gln Glu Glu Lys Glu Gln Ile Lys Ser
          100          105          110
Leu Asn Ser Arg Phe Ala Ala Phe Ile Asp Lys Val Arg Phe Leu Glu
          115          120          125
Gln Gln Asn Lys Leu Leu Glu Thr Lys Leu Gln Phe Tyr Gln Asn Arg
          130          135          140
Glu Cys Cys Gln Ser Asn Leu Glu Pro Leu Phe Glu Gly Tyr Ile Glu
          145          150          155          160
Thr Leu Arg Arg Glu Ala Glu Cys Val Glu Ala Asp Ser Gly Arg Leu
          165          170          175
Ala Ser Glu Leu Asn His Val Gln Glu Val Leu Glu Gly Tyr Lys Lys
          180          185          190
Lys Tyr Glu Glu Glu Val Ser Leu Arg Ala Thr Ala Glu Asn Glu Phe
          195          200          205
Val Ala Leu Lys Lys Asp Val Asp Cys Ala Tyr Leu Arg Lys Ser Asp
          210          215          220
Leu Glu Ala Asn Val Glu Ala Leu Ile Gln Glu Ile Asp Phe Leu Arg
          225          230          235          240
Arg Leu Tyr Glu Glu Ile Arg Ile Leu Gln Ser His Ile Ser Asp
          245          250          255

```

Thr Ser Val Val Val Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp
 260 265 270
 Cys Ile Ile Ala Glu Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg
 275 280 285
 Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met
 290 295 300
 Lys Ala Thr Val Ile Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu
 305 310 315 320
 Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val
 325 330 335
 Glu Asn Ala Lys Cys Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln
 340 345 350
 Ser Glu Gln Gln Gly Glu Ala Ala Leu Ser Asp Ala Arg Cys Lys Leu
 355 360 365
 Ala Glu Leu Glu Gly Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys
 370 375 380
 Leu Ile Arg Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp
 385 390 395 400
 Ile Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg
 405 410 415
 Leu Cys Glu Gly Ile Gly Ala Val Asn Val Cys Val Ser Ser Ser Arg
 420 425 430
 Gly Gly Val Val Cys Gly Asp Leu Cys Val Ser Gly Ser Arg Pro Val
 435 440 445
 Thr Gly Ser Val Cys Ser Ala Pro Cys Asn Gly Asn Val Ala Val Ser
 450 455 460
 Thr Gly Leu Cys Ala Pro Cys Gly Gln Leu Asn Thr Thr Cys Gly Gly
 465 470 475 480
 Gly Ser Cys Gly Val Gly Ser Cys Gly Ile Ser Ser Leu Gly Val Gly
 485 490 495
 Ser Cys Gly Ser Ser Cys Arg Lys Cys
 500 505
 <210> 446
 <211> 486
 <212> PRT
 <213> Homo sapiens

<400> 446
 Met Thr Cys Gly Ser Tyr Cys Gly Gly Arg Ala Phe Ser Cys Ile Ser
 1 5 10 15
 Ala Cys Gly Pro Arg Pro Gly Arg Cys Cys Ile Thr Ala Ala Pro Tyr
 20 25 30
 Arg Gly Ile Ser Cys Tyr Arg Gly Leu Thr Gly Gly Phe Gly Ser His
 35 40 45
 Ser Val Cys Gly Gly Phe Arg Ala Gly Ser Cys Gly Arg Ser Phe Gly
 50 55 60
 Tyr Arg Ser Gly Gly Val Cys Gly Pro Ser Pro Cys Ile Thr Thr
 65 70 75 80
 Val Ser Val Asn Glu Ser Leu Leu Thr Pro Leu Asn Leu Glu Ile Asp
 85 90 95
 Pro Asn Ala Gln Cys Val Lys Gln Glu Glu Lys Glu Gln Ile Lys Ser
 100 105 110
 Leu Asn Ser Arg Phe Ala Ala Phe Ile Asp Lys Val Arg Phe Leu Glu
 115 120 125
 Gln Gln Asn Lys Leu Leu Glu Thr Lys Leu Gln Phe Tyr Gln Asn Arg
 130 135 140
 Glu Cys Cys Gln Ser Asn Leu Glu Pro Leu Phe Glu Gly Tyr Ile Glu
 145 150 155 160
 Thr Leu Arg Arg Glu Ala Glu Cys Val Glu Ala Asp Ser Gly Arg Leu
 165 170 175

Ala Ser Glu Leu Asn His Val Gln Glu Val Leu Glu Gly Tyr Lys Lys
 180 185 190
 Lys Tyr Glu Glu Glu Val Ser Leu Arg Ala Thr Ala Glu Asn Glu Phe
 195 200 205
 Val Ala Leu Lys Lys Asp Val Asp Cys Ala Tyr Leu Arg Lys Ser Asp
 210 215 220
 Leu Glu Ala Asn Val Glu Ala Leu Ile Gln Glu Ile Asp Phe Leu Arg
 225 230 235 240
 Arg Leu Tyr Glu Glu Glu Ile Arg Val Leu Gln Ser His Ile Ser Asp
 245 250 255
 Thr Ser Val Val Val Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp
 260 265 270
 Cys Ile Ile Ala Glu Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg
 275 280 285
 Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met
 290 295 300
 Lys Ala Thr Val Ile Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu
 305 310 315 320
 Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val
 325 330 335
 Glu Asn Ala Lys Cys Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln
 340 345 350
 Ser Glu Gln Gln Gly Glu Ala Ala Leu Ser Asp Ala Arg Cys Lys Leu
 355 360 365
 Ala Glu Leu Glu Gly Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys
 370 375 380
 Leu Ile Arg Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp
 385 390 395 400
 Ile Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg
 405 410 415
 Leu Cys Glu Gly Val Gly Ser Val Asn Val Cys Val Ser Ser Ser Arg
 420 425 430
 Gly Gly Val Val Cys Gly Asp Leu Cys Ala Ser Thr Thr Ala Pro Val
 435 440 445
 Val Ser Thr Arg Val Ser Ser Val Pro Ser Asn Ser Asn Val Val Val
 450 455 460
 Gly Thr Thr Asn Ala Cys Ala Pro Ser Ala Arg Val Gly Val Cys Gly
 465 470 475 480
 Gly Ser Cys Lys Arg Cys
 485
 <210> 447
 <211> 493
 <212> PRT
 <213> Homo sapiens

<400> 447
 Met Thr Cys Gly Phe Asn Ser Ile Gly Cys Gly Phe Arg Pro Gly Asn
 1 5 10 15
 Phe Ser Cys Val Ser Ala Cys Gly Pro Arg Pro Ser Arg Cys Cys Ile
 20 25 30
 Thr Ala Ala Pro Tyr Arg Gly Ile Ser Cys Tyr Arg Gly Leu Thr Gly
 35 40 45
 Gly Phe Gly Ser His Ser Val Cys Gly Gly Phe Arg Ala Gly Ser Cys
 50 55 60
 Gly Arg Ser Phe Gly Tyr Arg Ser Gly Gly Val Cys Gly Pro Ser Pro
 65 70 75 80
 Pro Cys Ile Thr Thr Val Ser Val Asn Glu Ser Leu Leu Thr Pro Leu
 85 90 95
 Asn Leu Glu Ile Asp Pro Asn Ala Gln Cys Val Lys Gln Glu Glu Lys
 100 105 110

Glu Gln Ile Lys Ser Leu Asn Ser Arg Phe Ala Ala Phe Ile Asp Lys
 115 120 125
 Val Arg Phe Leu Glu Gln Gln Asn Lys Leu Leu Glu Thr Lys Leu Gln
 130 135 140
 Phe Tyr Gln Asn Cys Glu Cys Cys Gln Ser Asn Leu Glu Pro Leu Phe
 145 150 155 160
 Ala Gly Tyr Ile Glu Thr Leu Arg Arg Glu Ala Glu Cys Val Glu Ala
 165 170 175
 Asp Ser Gly Arg Leu Ala Ser Glu Leu Asn His Val Gln Glu Val Leu
 180 185 190
 Glu Gly Tyr Lys Lys Lys Tyr Glu Glu Glu Val Ala Leu Arg Ala Thr
 195 200 205
 Ala Glu Asn Glu Phe Val Ala Leu Lys Lys Asp Val Asp Cys Ala Tyr
 210 215 220
 Leu Arg Lys Ser Asp Leu Glu Ala Asn Val Glu Ala Leu Ile Gln Glu
 225 230 235 240
 Ile Asp Phe Leu Arg Arg Leu Tyr Glu Glu Glu Ile Arg Ile Leu Gln
 245 250 255
 Ser His Ile Ser Asp Thr Ser Val Val Lys Leu Asp Asn Ser Arg
 260 265 270
 Asp Leu Asn Met Asp Cys Ile Val Ala Glu Ile Lys Ala Gln Tyr Asp
 275 280 285
 Asp Ile Ala Thr Arg Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser
 290 295 300
 Lys Cys Glu Glu Met Lys Ala Thr Val Ile Arg His Gly Glu Thr Leu
 305 310 315 320
 Arg Arg Thr Lys Glu Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg
 325 330 335
 Leu Thr Ala Glu Val Glu Asn Ala Lys Cys Gln Asn Ser Lys Leu Glu
 340 345 350
 Ala Ala Val Ala Gln Ser Glu Gln Gln Gly Glu Ala Ala Leu Ser Asp
 355 360 365
 Ala Arg Cys Lys Leu Ala Glu Leu Glu Gly Ala Leu Gln Lys Ala Lys
 370 375 380
 Gln Asp Met Ala Cys Leu Ile Arg Glu Tyr Gln Glu Val Met Asn Ser
 385 390 395 400
 Lys Leu Gly Leu Asp Ile Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu
 405 410 415
 Gly Glu Glu Gln Arg Leu Cys Glu Gly Val Glu Ala Val Asn Val Cys
 420 425 430
 Val Ser Ser Ser Arg Gly Gly Val Val Cys Gly Asp Leu Cys Val Ser
 435 440 445
 Gly Ser Arg Pro Val Thr Gly Ser Val Cys Ser Ala Pro Cys Asn Gly
 450 455 460
 Asn Leu Val Val Ser Thr Gly Leu Cys Lys Pro Cys Gly Gln Leu Asn
 465 470 475 480
 Thr Thr Cys Gly Gly Gly Ser Cys Gly Gln Gly Arg Tyr
 485 490
 <210> 448
 <211> 143
 <212> PRT
 <213> Homo sapiens
 <400> 448
 Met Ala Ser Gln Ser Cys His Ile Ser Ser Gly Cys Gly Val Lys Asn
 1 5 10 15
 Phe Ser Ser Arg Ser Ala Thr Val Pro Lys Pro Gly Tyr His Ser Cys
 20 25 30
 Val Ser Ala Met Ala His His Gly Val Ser Pro Gly Gly Leu Gly Ser
 35 40 45

Arg Arg Leu Gly Gly Phe Gly Ser Gln Ser Leu Cys Thr Val Gly Ser
 50 55 60
 Pro Arg Ile Ala Val Ser Cys Arg Trp Pro Leu His Ser Arg Gly Arg
 65 70 75 80
 Phe Gly Tyr Trp Ala Gly Gly Leu Cys Arg Pro Ser Pro Pro Arg Ile
 85 90 95
 Thr Ser Val Thr Ile Asn Glu Ser Leu Leu Met Pro Leu Asn Leu Glu
 100 105 110
 Ile Asp Pro Asn Ala Gln Cys Val Lys His Glu Glu Lys Glu His Ile
 115 120 125
 Arg Cys Leu Asn Lys Phe Ala Ala Phe Ile Asp Lys Val Gly Leu
 130 135 140
 <210> 449
 <211> 507
 <212> PRT
 <213> Homo sapiens

<400> 449
 Met Ser Cys Arg Ser Tyr Arg Ile Ser Ser Gly Cys Gly Val Thr Arg
 1 5 10 15
 Asn Phe Ser Ser Cys Ser Ala Val Ala Pro Lys Thr Gly Asn Arg Cys
 20 25 30
 Cys Ile Ser Ala Ala Pro Tyr Arg Gly Val Ser Cys Tyr Arg Gly Leu
 35 40 45
 Thr Gly Phe Gly Ser Arg Ser Leu Cys Asn Leu Gly Ser Cys Gly Pro
 50 55 60
 Arg Ile Ala Val Gly Gly Phe Arg Ala Gly Ser Cys Gly Arg Ser Phe
 65 70 75 80
 Gly Tyr Arg Ser Gly Gly Val Cys Gly Pro Ser Pro Pro Cys Ile Thr
 85 90 95
 Thr Val Ser Val Asn Glu Ser Leu Leu Thr Pro Leu Asn Leu Glu Ile
 100 105 110
 Asp Pro Asn Ala Gln Cys Val Lys Gln Glu Glu Lys Glu Gln Ile Lys
 115 120 125
 Ser Leu Asn Ser Arg Phe Ala Ala Phe Ile Asp Lys Val Arg Phe Leu
 130 135 140
 Glu Gln Gln Asn Lys Leu Leu Glu Thr Lys Trp Gln Phe Tyr Gln Asn
 145 150 155 160
 Gln Arg Cys Cys Glu Ser Asn Leu Glu Pro Leu Phe Ser Gly Tyr Ile
 165 170 175
 Glu Thr Leu Arg Arg Glu Ala Glu Cys Val Glu Ala Asp Ser Gly Arg
 180 185 190
 Leu Ala Ser Glu Leu Asn His Val Gln Glu Val Leu Glu Gly Tyr Lys
 195 200 205
 Lys Lys Tyr Glu Glu Glu Val Ala Leu Arg Ala Thr Ala Glu Asn Glu
 210 215 220
 Phe Val Val Leu Lys Lys Asp Val Asp Cys Ala Tyr Leu Arg Lys Ser
 225 230 235 240
 Asp Leu Glu Ala Asn Val Glu Ala Leu Val Glu Glu Ser Ser Phe Leu
 245 250 255
 Arg Arg Leu Tyr Glu Glu Glu Ile Arg Val Leu Gln Ala His Ile Ser
 260 265 270
 Asp Thr Ser Val Ile Val Lys Met Asp Asn Ser Arg Asp Leu Asn Met
 275 280 285
 Asp Cys Ile Ile Ala Glu Ile Lys Ala Gln Tyr Asp Asp Val Ala Ser
 290 295 300
 Arg Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu
 305 310 315 320
 Met Lys Ala Thr Val Ile Arg His Gly Glu Thr Leu Arg Arg Thr Lys
 325 330 335

Glu Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg Leu Thr Ala Glu
 340 345 350
 Ile Glu Asn Ala Lys Cys Gln Arg Ala Lys Leu Glu Ala Ala Val Ala
 355 360 365
 Glu Ala Glu Gln Gln Gly Glu Ala Ala Leu Ser Asp Ala Arg Cys Lys
 370 375 380
 Leu Ala Glu Leu Glu Gly Ala Leu Gln Lys Ala Lys Gln Asp Met Ala
 385 390 395 400
 Cys Leu Leu Lys Glu Tyr Gln Glu Val Met Asn Ser Lys Leu Gly Leu
 405 410 415
 Asp Ile Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Gly Glu Glu His
 420 425 430
 Arg Leu Cys Glu Gly Val Gly Ser Val Asn Val Cys Val Ser Ser Ser
 435 440 445
 Arg Gly Gly Val Ser Cys Gly Gly Leu Ser Tyr Ser Thr Thr Pro Gly
 450 455 460
 Arg Gln Ile Thr Ser Gly Pro Ser Ala Ile Gly Gly Ser Ile Thr Val
 465 470 475 480
 Val Ala Pro Asp Ser Cys Ala Pro Cys Gln Pro Arg Ser Ser Ser Phe
 485 490 495
 Ser Cys Gly Ser Ser Arg Ser Val Arg Phe Ala
 500 505

<210> 450

<211> 600

<212> PRT

<213> Homo sapiens

<400> 450

Met Ser Cys Arg Ser Tyr Arg Val Ser Ser Gly His Arg Val Gly Asn
 1 5 10 15
 Phe Ser Ser Cys Ser Ala Met Thr Pro Gln Asn Leu Asn Arg Phe Arg
 20 25 30
 Ala Asn Ser Val Ser Cys Trp Ser Gly Pro Gly Phe Arg Gly Leu Gly
 35 40 45
 Ser Phe Gly Ser Arg Ser Val Ile Thr Phe Gly Ser Tyr Ser Pro Arg
 50 55 60
 Ile Ala Ala Val Gly Ser Arg Pro Ile His Cys Gly Val Arg Phe Gly
 65 70 75 80
 Ala Gly Cys Gly Met Gly Phe Gly Asp Gly Arg Gly Val Gly Leu Gly
 85 90 95
 Pro Arg Ala Asp Ser Cys Val Gly Leu Gly Phe Gly Ala Gly Ser Gly
 100 105 110
 Ile Gly Tyr Gly Phe Gly Gly Pro Gly Phe Gly Tyr Arg Val Gly Gly
 115 120 125
 Val Gly Val Pro Ala Ala Pro Ser Ile Thr Ala Val Thr Val Asn Lys
 130 135 140
 Ser Leu Leu Thr Pro Leu Asn Leu Glu Ile Asp Pro Asn Ala Gln Arg
 145 150 155 160
 Val Lys Lys Asp Glu Lys Glu Gln Ile Lys Thr Leu Asn Asn Lys Phe
 165 170 175
 Ala Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Lys Leu
 180 185 190
 Leu Glu Thr Lys Trp Ser Phe Leu Gln Glu Gln Lys Cys Ile Arg Ser
 195 200 205
 Asn Leu Glu Pro Leu Phe Glu Ser Tyr Ile Thr Asn Leu Arg Arg Gln
 210 215 220
 Leu Glu Val Leu Val Ser Asp Gln Ala Arg Leu Gln Ala Glu Arg Asn
 225 230 235 240
 His Leu Gln Asp Val Leu Glu Gly Phe Lys Lys Lys Tyr Glu Glu Glu
 245 250 255

Val Val Cys Arg Ala Asn Ala Glu Asn Glu Phe Val Ala Leu Lys Lys
 260 265 270
 Asp Val Asp Ala Ala Phe Met Asn Lys Ser Asp Leu Glu Ala Asn Val
 275 280 285
 Asp Thr Leu Thr Gln Glu Ile Asp Phe Leu Lys Thr Leu Tyr Met Glu
 290 295 300
 Glu Ile Gln Leu Leu Gln Ser His Ile Ser Glu Thr Ser Val Ile Val
 305 310 315 320
 Lys Met Asp Asn Ser Arg Asp Leu Asn Leu Asp Gly Ile Ile Ala Glu
 325 330 335
 Val Lys Ala Gln Tyr Glu Glu Val Ala Arg Arg Ser Arg Ala Asp Ala
 340 345 350
 Glu Ala Trp Tyr Gln Thr Lys Tyr Glu Glu Met Gln Val Thr Ala Gly
 355 360 365
 Gln His Cys Asp Asn Leu Arg Asn Ile Arg Asn Glu Ile Asn Glu Leu
 370 375 380
 Thr Arg Leu Ile Gln Arg Leu Lys Ala Glu Ile Glu His Ala Lys Ala
 385 390 395 400
 Gln Arg Ala Lys Leu Glu Ala Ala Val Ala Glu Ala Glu Gln Gln Gly
 405 410 415
 Glu Ala Thr Leu Ser Asp Ala Lys Cys Lys Leu Ala Asp Leu Glu Cys
 420 425 430
 Ala Leu Gln Gln Ala Lys Gln Asp Met Ala Arg Gln Leu Cys Glu Tyr
 435 440 445
 Gln Glu Leu Met Asn Ala Lys Leu Gly Leu Asp Ile Glu Ile Ala Thr
 450 455 460
 Tyr Arg Arg Leu Leu Glu Gly Glu Glu Ser Arg Leu Cys Glu Gly Val
 465 470 475 480
 Gly Pro Val Asn Ile Ser Val Ser Ser Ser Arg Gly Gly Leu Val Cys
 485 490 495
 Gly Pro Glu Pro Leu Val Ala Gly Ser Thr Leu Ser Arg Gly Gly Val
 500 505 510
 Thr Phe Ser Gly Ser Ser Ser Val Cys Ala Thr Ser Gly Val Leu Ala
 515 520 525
 Ser Cys Gly Pro Ser Leu Gly Gly Ala Arg Val Ala Pro Ala Thr Gly
 530 535 540
 Asp Leu Leu Ser Thr Gly Thr Arg Ser Gly Ser Met Leu Ile Ser Glu
 545 550 555 560
 Ala Cys Val Pro Ser Val Pro Cys Pro Leu Pro Thr Gln Gly Gly Phe
 565 570 575
 Ser Ser Cys Ser Gly Gly Arg Ser Ser Ser Val Arg Phe Val Ser Thr
 580 585 590
 Thr Thr Ser Cys Arg Thr Lys Tyr
 595 600

<210> 451

<211> 513

<212> PRT

<213> Homo sapiens

<400> 451

Met Ser Tyr His Ser Phe Gln Pro Gly Ser Arg Cys Gly Ser Gln Ser
 1 5 10 15
 Phe Ser Ser Tyr Ser Ala Val Met Pro Arg Met Val Thr His Tyr Ala
 20 25 30
 Val Ser Lys Gly Pro Cys Arg Pro Gly Gly Gly Arg Gly Leu Arg Ala
 35 40 45
 Leu Gly Cys Leu Gly Ser Arg Ser Leu Cys Asn Val Gly Phe Gly Arg
 50 55 60
 Pro Arg Val Ala Ser Arg Cys Gly Gly Thr Leu Pro Gly Phe Gly Tyr
 65 70 75 80

Arg	Leu	Gly	Ala	Thr	Cys	Gly	Pro	Ser	Ala	Cys	Ile	Thr	Pro	Val	Thr
				85					90					95	
Ile	Asn	Glu	Ser	Leu	Leu	Val	Pro	Leu	Ala	Leu	Glu	Ile	Asp	Pro	Thr
			100					105					110		
Val	Gln	Arg	Val	Lys	Arg	Asp	Glu	Lys	Glu	Gln	Ile	Lys	Cys	Leu	Asn
		115				120						125			
Asn	Arg	Phe	Ala	Ser	Phe	Ile	Asn	Lys	Val	Arg	Phe	Leu	Glu	Gln	Lys
	130					135					140				
Asn	Lys	Leu	Leu	Glu	Thr	Lys	Trp	Asn	Phe	Met	Gln	Gln	Gln	Arg	Cys
145					150					155					160
Cys	Gln	Thr	Asn	Ile	Glu	Pro	Ile	Phe	Glu	Gly	Tyr	Ile	Ser	Ala	Leu
			165						170					175	
Arg	Arg	Gln	Leu	Asp	Cys	Val	Ser	Gly	Asp	Arg	Val	Arg	Leu	Glu	Ser
			180					185					190		
Glu	Leu	Cys	Ser	Leu	Gln	Ala	Ala	Leu	Glu	Gly	Tyr	Lys	Lys	Lys	Tyr
		195					200					205			
Glu	Glu	Glu	Leu	Ser	Leu	Arg	Pro	Cys	Val	Glu	Asn	Glu	Phe	Val	Ala
	210					215					220				
Leu	Lys	Lys	Asp	Val	Asp	Thr	Ala	Phe	Leu	Met	Lys	Ala	Asp	Leu	Glu
225					230					235					240
Thr	Asn	Ala	Glu	Ala	Leu	Val	Gln	Glu	Ile	Asp	Phe	Leu	Lys	Ser	Leu
			245						250					255	
Tyr	Glu	Glu	Glu	Ile	Cys	Leu	Leu	Gln	Ser	Gln	Ile	Ser	Glu	Thr	Ser
			260					265					270		
Val	Ile	Val	Lys	Met	Asp	Asn	Ser	Arg	Glu	Leu	Asp	Val	Asp	Gly	Ile
		275				280						285			
Ile	Ala	Glu	Ile	Lys	Ala	Gln	Tyr	Asp	Asp	Ile	Ala	Ser	Arg	Ser	Lys
	290					295					300				
Ala	Glu	Ala	Glu	Ala	Trp	Tyr	Gln	Cys	Arg	Tyr	Glu	Glu	Leu	Arg	Val
305					310					315					320
Thr	Ala	Gly	Asn	His	Cys	Asp	Asn	Leu	Arg	Asn	Arg	Lys	Asn	Glu	Ile
			325					330						335	
Leu	Glu	Met	Asn	Lys	Leu	Ile	Gln	Arg	Leu	Gln	Gln	Glu	Thr	Glu	Asn
		340						345					350		
Val	Lys	Ala	Gln	Arg	Cys	Lys	Leu	Glu	Gly	Ala	Ile	Ala	Glu	Ala	Glu
		355					360					365			
Gln	Gln	Gly	Glu	Ala	Ala	Leu	Asn	Asp	Ala	Lys	Cys	Lys	Leu	Ala	Gly
	370					375					380				
Leu	Glu	Glu	Ala	Leu	Gln	Lys	Ala	Lys	Gln	Asp	Met	Ala	Cys	Leu	Leu
385					390					395					400
Lys	Glu	Tyr	Gln	Glu	Val	Met	Asn	Ser	Lys	Leu	Gly	Leu	Asp	Ile	Glu
			405					410						415	
Ile	Ala	Thr	Tyr	Arg	Arg	Leu	Leu	Glu	Gly	Glu	Glu	His	Arg	Leu	Cys
		420						425					430		
Glu	Gly	Ile	Gly	Pro	Val	Asn	Ile	Ser	Val	Ser	Ser	Ser	Lys	Gly	Ala
		435					440					445			
Phe	Leu	Tyr	Glu	Pro	Cys	Gly	Val	Ser	Thr	Pro	Val	Leu	Ser	Thr	Gly
	450					455					460				
Val	Leu	Arg	Ser	Asn	Gly	Gly	Cys	Ser	Ile	Val	Gly	Thr	Gly	Glu	Leu
465					470					475					480
Tyr	Val	Pro	Cys	Glu	Pro	Gln	Gly	Leu	Leu	Ser	Cys	Gly	Ser	Gly	Arg
			485						490					495	
Lys	Ser	Ser	Met	Thr	Leu	Gly	Ala	Gly	Gly	Ser	Ser	Pro	Ser	His	Lys
			500					505					510		

His

<210> 452

<211> 85

<212> PRT

<213> Homo sapiens

<400> 452

Met Asp Ala Val Tyr Met Asn Lys Val Gly Leu Glu Ala Lys Val Asp
 1 5 10 15
 Ala Leu Met Glu Thr Asn Phe Leu Ser Thr Phe Tyr Lys Ala Val
 20 25 30
 Arg Val Pro Gly Ala Pro Ser Asn Arg Gly Ala Gly Gly Trp Val Leu
 35 40 45
 Glu Pro Gln Leu Gly Thr Glu Pro Val Gly Ser Phe Pro Gly Leu Leu
 50 55 60
 Ser Ala Pro Tyr Pro Thr Cys Val Leu Gln Gly Arg Cys His Phe Pro
 65 70 75 80
 Tyr His Arg Arg Lys
 85

<210> 453

<211> 564

<212> PRT

<213> Homo sapiens

<400> 453

Met Ala Ser Thr Ser Thr Thr Ile Arg Ser His Ser Ser Ser Arg Arg
 1 5 10 15
 Gly Phe Ser Ala Ser Ser Ala Arg Leu Pro Gly Val Ser Arg Ser Gly
 20 25 30
 Phe Ser Ser Ile Ser Val Ser Arg Ser Arg Gly Ser Gly Leu Gly
 35 40 45
 Gly Ala Cys Gly Gly Ala Gly Phe Gly Ser Arg Ser Leu Tyr Gly Leu
 50 55 60
 Gly Gly Ser Lys Arg Ile Ser Ile Gly Gly Gly Ser Cys Ala Ile Ser
 65 70 75 80
 Gly Gly Tyr Gly Ser Arg Ala Gly Gly Ser Tyr Gly Phe Gly Gly Ala
 85 90 95
 Gly Ser Gly Phe Gly Phe Gly Gly Gly Ala Gly Ile Gly Phe Gly Leu
 100 105 110
 Gly Gly Gly Ala Gly Leu Ala Gly Gly Phe Gly Gly Pro Gly Phe Pro
 115 120 125
 Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr Val Asn Gln Ser Leu
 130 135 140
 Leu Thr Pro Leu Asn Leu Gln Ile Asp Pro Ala Ile Gln Arg Val Arg
 145 150 155 160
 Ala Glu Glu Arg Glu Gln Ile Lys Thr Leu Asn Asn Lys Phe Ala Ser
 165 170 175
 Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Lys Val Leu Asp
 180 185 190
 Thr Lys Trp Thr Leu Leu Gln Glu Gln Gly Thr Lys Thr Val Arg Gln
 195 200 205
 Asn Leu Glu Pro Leu Phe Glu Gln Tyr Ile Asn Asn Leu Arg Arg Gln
 210 215 220
 Leu Asp Ser Ile Val Gly Glu Arg Gly Arg Leu Asp Ser Glu Leu Arg
 225 230 235 240
 Asn Met Gln Asp Leu Val Glu Asp Leu Lys Asn Lys Tyr Glu Asp Glu
 245 250 255
 Ile Asn Lys Arg Thr Ala Ala Glu Asn Glu Phe Val Thr Leu Lys Lys
 260 265 270
 Asp Val Asp Ala Ala Tyr Met Asn Lys Val Glu Leu Gln Ala Lys Ala
 275 280 285
 Asp Thr Leu Thr Asp Glu Ile Asn Phe Leu Arg Ala Leu Tyr Asp Ala
 290 295 300
 Glu Leu Ser Gln Met Gln Thr His Ile Ser Asp Thr Ser Val Val Leu
 305 310 315 320
 Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile Ala Glu
 325 330 335

Val Lys Ala Gln Tyr Glu Glu Ile Ala Gln Arg Ser Arg Ala Glu Ala
 340 345 350
 Glu Ser Trp Tyr Gln Thr Lys Tyr Glu Glu Leu Gln Val Thr Ala Gly
 355 360 365
 Arg His Gly Asp Asp Leu Arg Asn Thr Lys Gln Glu Ile Ala Glu Ile
 370 375 380
 Asn Arg Met Ile Gln Arg Leu Arg Ser Glu Ile Asp His Val Lys Lys
 385 390 395 400
 Gln Cys Ala Asn Leu Gln Ala Ala Ile Ala Asp Ala Glu Gln Arg Gly
 405 410 415
 Glu Met Ala Leu Lys Asp Ala Lys Asn Lys Leu Glu Gly Leu Glu Asp
 420 425 430
 Ala Leu Gln Lys Ala Lys Gln Asp Leu Ala Arg Leu Leu Lys Glu Tyr
 435 440 445
 Gln Glu Leu Met Asn Val Lys Leu Ala Leu Asp Val Glu Ile Ala Thr
 450 455 460
 Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Leu Asn Gly Glu Gly
 465 470 475 480
 Val Gly Gln Val Asn Ile Ser Val Val Gln Ser Thr Val Ser Ser Gly
 485 490 495
 Tyr Gly Gly Ala Ser Gly Val Gly Ser Gly Leu Gly Leu Gly Gly Gly
 500 505 510
 Ser Ser Tyr Ser Tyr Gly Ser Gly Leu Gly Val Gly Gly Gly Phe Ser
 515 520 525
 Ser Ser Ser Gly Arg Ala Thr Gly Gly Gly Leu Ser Ser Val Gly Gly
 530 535 540
 Gly Ser Ser Thr Ile Lys Tyr Thr Thr Thr Ser Ser Ser Ser Arg Lys
 545 550 555 560
 Ser Tyr Lys His

<210> 454

<211> 564

<212> PRT

<213> Homo sapiens

<400> 454

Met Ala Ser Thr Ser Thr Thr Ile Arg Ser His Ser Ser Ser Arg Arg
 1 5 10 15
 Gly Phe Ser Ala Asn Ser Ala Arg Leu Pro Gly Val Ser Arg Ser Gly
 20 25 30
 Phe Ser Ser Ile Ser Val Ser Arg Ser Arg Gly Ser Gly Gly Leu Gly
 35 40 45
 Gly Ala Cys Gly Gly Ala Gly Phe Gly Ser Arg Ser Leu Tyr Gly Leu
 50 55 60
 Gly Gly Ser Lys Arg Ile Ser Ile Gly Gly Gly Ser Cys Ala Ile Ser
 65 70 75 80
 Gly Gly Tyr Gly Ser Arg Ala Arg Gly Ser Tyr Gly Phe Gly Gly Ala
 85 90 95
 Gly Ser Gly Phe Gly Phe Gly Gly Gly Ala Gly Ile Gly Phe Asp Leu
 100 105 110
 Gly Gly Gly Ala Gly Leu Ala Gly Phe Gly Gly Pro Gly Phe Pro
 115 120 125
 Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr Val Asn Gln Ser Leu
 130 135 140
 Leu Thr Pro Leu Asn Leu Gln Ile Asp Pro Ala Ile Gln Arg Val Arg
 145 150 155 160
 Ala Glu Glu Arg Glu Gln Ile Lys Thr Leu Asn Asn Lys Phe Ala Ser
 165 170 175
 Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Lys Val Leu Asp
 180 185 190

```

Thr Lys Trp Thr Leu Leu Gln Glu Gln Gly Thr Lys Thr Val Arg Gln
195 200 205
Asn Leu Glu Pro Leu Phe Glu Gln Tyr Ile Asn Asn Leu Arg Arg Gln
210 215 220
Leu Asp Asn Ile Val Gly Glu Arg Gly Arg Leu Asp Ser Glu Leu Arg
225 230 235 240
Asn Met Gln Asp Leu Val Glu Asp Leu Lys Asn Lys Tyr Glu Asp Glu
245 250 255
Ile Asn Lys Arg Thr Ala Ala Glu Asn Glu Phe Val Thr Leu Lys Lys
260 265 270
Asp Val Asp Ala Ala Tyr Met Asn Lys Val Glu Leu Gln Ala Lys Ala
275 280 285
Asp Thr Leu Thr Asp Glu Ile Asn Phe Leu Arg Ala Leu Tyr Asp Ala
290 295 300
Glu Leu Ser Gln Met Gln Thr His Ile Ser Asp Thr Ser Val Val Leu
305 310 315 320
Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile Ala Glu
325 330 335
Val Lys Ala Gln Tyr Glu Glu Ile Ala Gln Arg Ser Arg Ala Glu Ala
340 345 350
Glu Ser Trp Tyr Gln Thr Lys Tyr Glu Glu Leu Gln Val Thr Ala Gly
355 360 365
Arg His Gly Asp Asp Leu Arg Asn Thr Lys Gln Glu Ile Ala Glu Ile
370 375 380
Asn Arg Met Ile Gln Arg Leu Arg Ser Glu Ile Asp His Val Lys Lys
385 390 395 400
Gln Cys Ala Ser Leu Gln Ala Ala Ile Ala Asp Ala Glu Gln Arg Gly
405 410 415
Glu Met Ala Leu Lys Asp Ala Lys Asn Lys Leu Glu Gly Leu Glu Asp
420 425 430
Ala Leu Gln Lys Ala Lys Gln Asp Leu Ala Arg Leu Leu Lys Glu Tyr
435 440 445
Gln Glu Leu Met Asn Val Lys Leu Ala Leu Asp Val Glu Ile Ala Thr
450 455 460
Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Leu Asn Gly Glu Gly
465 470 475 480
Ile Gly Gln Val Asn Val Ser Val Val Gln Ser Thr Ile Ser Ser Gly
485 490 495
Tyr Gly Gly Ala Ser Gly Val Gly Ser Gly Leu Gly Leu Gly Gly Gly
500 505 510
Ser Ser Tyr Ser Tyr Gly Ser Gly Leu Gly Ile Gly Gly Gly Phe Ser
515 520 525
Ser Ser Ser Gly Arg Ala Ile Gly Gly Gly Leu Ser Ser Val Gly Gly
530 535 540
Gly Ser Ser Thr Ile Lys Tyr Thr Thr Thr Ser Ser Ser Ser Arg Lys
545 550 555 560
Ser Tyr Lys His

```

<210> 455

<211> 564

<212> PRT

<213> Homo sapiens

<400> 455

```

Met Ala Ser Thr Ser Thr Thr Ile Arg Ser His Ser Ser Ser Arg Arg
1 5 10 15
Gly Phe Ser Ala Asn Ser Ala Arg Leu Pro Gly Val Ser Arg Ser Gly
20 25 30
Phe Ser Ser Ile Ser Val Ser Arg Ser Arg Gly Ser Gly Gly Leu Gly
35 40 45

```

Gly Ala Cys Gly Gly Ala Gly Phe Gly Ser Arg Ser Leu Tyr Gly Leu
 50 55 60
 Gly Gly Ser Lys Arg Ile Ser Ile Gly Gly Gly Ser Cys Ala Ile Ser
 65 70 75 80
 Gly Gly Tyr Gly Ser Arg Ala Arg Ala Ser Tyr Gly Phe Gly Gly Ala
 85 90 95
 Gly Ser Gly Phe Gly Phe Gly Gly Gly Ala Gly Ile Gly Phe Asp Leu
 100 105 110
 Gly Gly Gly Ala Gly Leu Ala Gly Gly Phe Gly Gly Pro Gly Phe Pro
 115 120 125
 Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr Val Asn Gln Ser Leu
 130 135 140
 Leu Thr Pro Leu Asn Leu Gln Ile Asp Pro Ala Ile Gln Arg Val Arg
 145 150 155 160
 Ala Glu Glu Arg Glu Gln Ile Lys Thr Leu Asn Asn Lys Phe Ala Ser
 165 170 175
 Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Lys Val Leu Glu
 180 185 190
 Thr Lys Trp Thr Leu Leu Gln Glu Gln Gly Thr Lys Thr Val Arg Gln
 195 200 205
 Asn Leu Glu Pro Leu Phe Glu Gln Tyr Ile Asn Asn Leu Arg Arg Gln
 210 215 220
 Leu Asp Ser Ile Val Gly Glu Arg Gly Arg Leu Asp Ser Glu Leu Arg
 225 230 235 240
 Gly Met Gln Asp Leu Val Glu Asp Phe Lys Asn Lys Tyr Glu Asp Glu
 245 250 255
 Ile Asn Lys Arg Thr Ala Ala Glu Asn Glu Phe Val Thr Leu Lys Lys
 260 265 270
 Asp Val Asp Ala Ala Tyr Met Asn Lys Val Glu Leu Gln Ala Lys Ala
 275 280 285
 Asp Thr Leu Thr Asp Glu Ile Asn Phe Leu Arg Ala Leu Tyr Asp Ala
 290 295 300
 Glu Leu Ser Gln Met Gln Thr His Ile Ser Asp Thr Ser Val Val Leu
 305 310 315 320
 Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile Ala Glu
 325 330 335
 Val Lys Ala Gln Tyr Glu Glu Ile Ala Gln Arg Ser Arg Ala Glu Ala
 340 345 350
 Glu Ser Trp Tyr Gln Thr Lys Tyr Glu Glu Leu Gln Val Thr Ala Gly
 355 360 365
 Arg His Gly Asp Asp Leu Arg Asn Thr Lys Gln Glu Ile Ala Glu Ile
 370 375 380
 Asn Arg Met Ile Gln Arg Leu Arg Ser Glu Ile Asp His Val Lys Lys
 385 390 395 400
 Gln Cys Ala Asn Leu Gln Ala Ala Ile Ala Asp Ala Glu Gln Arg Gly
 405 410 415
 Glu Met Ala Leu Lys Asp Ala Lys Asn Lys Leu Glu Gly Leu Glu Asp
 420 425 430
 Ala Leu Gln Lys Ala Lys Gln Asp Leu Ala Arg Leu Leu Lys Glu Tyr
 435 440 445
 Gln Glu Leu Met Asn Val Lys Leu Ala Leu Asp Val Glu Ile Ala Thr
 450 455 460
 Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Leu Asn Gly Glu Gly
 465 470 475 480
 Val Gly Gln Val Asn Ile Ser Val Val Gln Ser Thr Val Ser Ser Gly
 485 490 495
 Tyr Gly Gly Ala Ser Gly Val Gly Ser Gly Leu Gly Leu Gly Gly Gly
 500 505 510
 Ser Ser Tyr Ser Tyr Gly Ser Gly Leu Gly Val Gly Gly Gly Phe Ser
 515 520 525
 Ser Ser Ser Gly Arg Ala Ile Gly Gly Gly Leu Ser Ser Val Gly Gly
 530 535 540
 Gly Ser Ser Thr Ile Lys Tyr Thr Thr Thr Ser Ser Ser Ser Arg Lys
 545 550 555 560
 Ser Tyr Lys His

<210> 456
 <211> 564
 <212> PRT
 <213> Homo sapiens

<400> 456
 Met Ala Ser Thr Ser Thr Thr Ile Arg Ser His Ser Ser Ser Arg Arg
 1 5 10 15
 Gly Phe Ser Ala Asn Ser Ala Arg Leu Pro Gly Val Ser Arg Ser Gly
 20 25 30
 Phe Ser Ser Val Ser Val Ser Arg Ser Arg Gly Ser Gly Gly Leu Gly
 35 40 45
 Gly Ala Cys Gly Gly Ala Gly Phe Gly Ser Arg Ser Leu Tyr Gly Leu
 50 55 60
 Gly Gly Ser Lys Arg Ile Ser Ile Gly Gly Gly Ser Cys Ala Ile Ser
 65 70 75 80
 Gly Gly Tyr Gly Ser Arg Ala Gly Gly Ser Tyr Gly Phe Gly Gly Ala
 85 90 95
 Gly Ser Gly Phe Gly Phe Gly Gly Gly Ala Gly Ile Gly Phe Gly Leu
 100 105 110
 Gly Gly Gly Ala Gly Leu Ala Gly Gly Phe Gly Gly Pro Gly Phe Pro
 115 120 125
 Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr Val Asn Gln Ser Leu
 130 135 140
 Leu Thr Pro Leu Asn Leu Gln Ile Asp Pro Thr Ile Gln Arg Val Arg
 145 150 155 160
 Ala Glu Glu Arg Glu Gln Ile Lys Thr Leu Asn Asn Lys Phe Ala Ser
 165 170 175
 Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Lys Val Leu Glu
 180 185 190
 Thr Lys Trp Thr Leu Leu Gln Glu Gln Gly Thr Lys Thr Val Arg Gln
 195 200 205
 Asn Leu Glu Pro Leu Phe Glu Gln Tyr Ile Asn Asn Leu Arg Arg Gln
 210 215 220
 Leu Asp Ser Ile Val Gly Glu Arg Gly Arg Leu Asp Ser Glu Leu Arg
 225 230 235 240
 Gly Met Gln Asp Leu Val Glu Asp Phe Lys Asn Lys Tyr Glu Asp Glu
 245 250 255
 Ile Asn Lys Arg Thr Ala Ala Glu Asn Glu Phe Val Thr Leu Lys Lys
 260 265 270
 Asp Val Asp Ala Ala Tyr Met Asn Lys Val Glu Leu Gln Ala Lys Ala
 275 280 285
 Asp Thr Leu Thr Asp Glu Ile Asn Phe Leu Arg Ala Leu Tyr Asp Ala
 290 295 300
 Glu Leu Ser Gln Met Gln Thr His Ile Ser Asp Thr Ser Val Val Leu
 305 310 315 320
 Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile Ala Glu
 325 330 335
 Val Lys Ala Gln Tyr Glu Glu Ile Ala Gln Arg Ser Arg Ala Glu Ala
 340 345 350
 Glu Ser Trp Tyr Gln Thr Lys Tyr Glu Glu Leu Gln Val Thr Ala Gly
 355 360 365
 Arg His Gly Asp Asp Leu Arg Asn Thr Lys Gln Glu Ile Ala Glu Ile
 370 375 380
 Asn Arg Met Ile Gln Arg Leu Arg Ser Glu Ile Asp His Val Lys Lys
 385 390 395 400
 Gln Cys Ala Asn Leu Gln Ala Ala Ile Ala Asp Ala Glu Gln Arg Gly
 405 410 415
 Glu Met Ala Leu Lys Asp Ala Lys Asn Lys Leu Glu Gly Leu Glu Asp
 420 425 430

Ala Leu Gln Lys Ala Lys Gln Asp Leu Ala Arg Leu Leu Lys Glu Tyr
 435 440 445
 Gln Glu Leu Met Asn Val Lys Leu Ala Leu Asp Val Glu Ile Ala Thr
 450 455 460
 Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Leu Asn Gly Glu Gly
 465 470 475 480
 Val Gly Gln Val Asn Ile Ser Val Val Gln Ser Thr Val Ser Ser Gly
 485 490 495
 Tyr Gly Gly Ala Ser Gly Val Gly Ser Gly Leu Gly Leu Gly Gly Gly
 500 505 510
 Ser Ser Tyr Ser Tyr Gly Ser Gly Leu Gly Val Gly Gly Phe Ser
 515 520 525
 Ser Ser Ser Gly Arg Ala Ile Gly Gly Gly Leu Ser Ser Val Gly Gly
 530 535 540
 Gly Ser Ser Thr Ile Lys Tyr Thr Thr Thr Ser Ser Ser Ser Arg Lys
 545 550 555 560
 Ser Tyr Lys His

<210> 457

<211> 590

<212> PRT

<213> Homo sapiens

<400> 457

Met Ser Arg Gln Ser Ser Val Ser Phe Arg Ser Gly Gly Ser Arg Ser
 1 5 10 15
 Phe Ser Thr Ala Ser Ala Ile Thr Pro Ser Val Ser Arg Thr Ser Phe
 20 25 30
 Thr Ser Val Ser Arg Ser Gly Gly Gly Gly Gly Gly Phe Gly Arg
 35 40 45
 Val Ser Leu Ala Gly Ala Cys Gly Val Gly Gly Tyr Gly Ser Arg Ser
 50 55 60
 Leu Tyr Asn Leu Gly Gly Ser Lys Arg Ile Ser Ile Ser Thr Arg Gly
 65 70 75 80
 Gly Ser Phe Arg Asn Arg Phe Gly Ala Gly Ala Gly Gly Gly Tyr Gly
 85 90 95
 Phe Gly Gly Gly Ala Gly Ser Gly Phe Gly Phe Gly Gly Gly Ala Gly
 100 105 110
 Gly Gly Phe Gly Leu Gly Gly Gly Ala Gly Phe Gly Gly Gly Phe Gly
 115 120 125
 Gly Pro Gly Phe Pro Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr
 130 135 140
 Val Asn Gln Ser Leu Leu Thr Pro Leu Asn Leu Gln Ile Asp Pro Ser
 145 150 155 160
 Ile Gln Arg Val Arg Thr Glu Glu Arg Glu Gln Ile Lys Thr Leu Asn
 165 170 175
 Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln
 180 185 190
 Asn Lys Val Leu Asp Thr Lys Trp Thr Leu Leu Gln Glu Gln Gly Thr
 195 200 205
 Lys Thr Val Arg Gln Asn Leu Glu Pro Leu Phe Glu Gln Tyr Ile Asn
 210 215 220
 Asn Leu Arg Arg Gln Leu Asp Ser Ile Val Gly Glu Arg Gly Arg Leu
 225 230 235 240
 Asp Ser Glu Leu Arg Asn Met Gln Asp Leu Val Glu Asp Phe Lys Asn
 245 250 255
 Lys Tyr Glu Asp Glu Ile Asn Lys Arg Thr Thr Ala Glu Asn Glu Phe
 260 265 270
 Val Met Leu Lys Lys Asp Val Asp Ala Ala Tyr Met Asn Lys Val Glu
 275 280 285

```

Leu Glu Ala Lys Val Asp Ala Leu Met Asp Glu Ile Asn Phe Met Lys
 290          295          300
Met Phe Phe Asp Ala Glu Leu Ser Gln Met Gln Thr His Val Ser Asp
305          310          315          320
Thr Ser Val Val Leu Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp
          325          330          335
Ser Ile Ile Ala Glu Val Lys Ala Gln Tyr Glu Glu Ile Ala Asn Arg
          340          345          350
Ser Arg Thr Glu Ala Glu Ser Trp Tyr Gln Thr Lys Tyr Glu Glu Leu
          355          360          365
Gln Gln Thr Ala Gly Arg His Gly Asp Asp Leu Arg Asn Thr Lys His
          370          375          380
Glu Ile Thr Glu Met Asn Arg Met Ile Gln Arg Leu Arg Ala Glu Ile
385          390          395          400
Asp Asn Val Lys Lys Gln Cys Ala Asn Leu Gln Asn Ala Ile Ala Asp
          405          410          415
Ala Glu Gln Arg Gly Glu Leu Ala Leu Lys Asp Ala Arg Asn Lys Leu
          420          425          430
Ala Glu Leu Glu Glu Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Arg
          435          440          445
Leu Leu Arg Glu Tyr Gln Glu Leu Met Asn Thr Lys Leu Ala Leu Asp
          450          455          460
Val Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg
465          470          475          480
Leu Ser Gly Glu Gly Val Gly Pro Val Asn Ile Ser Val Val Thr Ser
          485          490          495
Ser Val Ser Ser Gly Tyr Gly Ser Gly Ser Gly Tyr Gly Gly Leu
          500          505          510
Gly Gly Gly Leu Gly Gly Gly Leu Gly Gly Gly Leu Ala Gly Gly Ser
          515          520          525
Ser Gly Ser Tyr Tyr Ser Ser Ser Ser Gly Gly Val Gly Leu Gly Gly
          530          535          540
Gly Leu Ser Val Gly Gly Ser Gly Phe Ser Ala Ser Ser Gly Arg Gly
545          550          555          560
Leu Gly Val Gly Phe Gly Ser Gly Gly Gly Ser Ser Ser Ser Val Lys
          565          570          575
Phe Val Ser Thr Thr Ser Ser Ser Arg Lys Ser Phe Lys Ser
          580          585          590

```

<210> 458

<211> 523

<212> PRT

<213> Homo sapiens

<400> 458

```

Met Ser Arg Gln Phe Thr Cys Lys Ser Gly Ala Ala Ala Lys Gly Gly
 1          5          10          15
Phe Ser Gly Cys Ser Ala Val Leu Ser Gly Gly Ser Ser Ser Ser Phe
          20          25          30
Arg Ala Gly Ser Lys Gly Leu Ser Gly Gly Phe Gly Ser Arg Ser Leu
          35          40          45
Tyr Ser Leu Gly Gly Val Arg Ser Leu Asn Val Ala Ser Gly Ser Gly
          50          55          60
Lys Ser Gly Gly Tyr Gly Phe Gly Arg Gly Arg Ala Ser Gly Phe Ala
65          70          75          80
Gly Ser Met Phe Gly Ser Val Ala Leu Gly Pro Val Cys Pro Thr Val
          85          90          95
Cys Pro Pro Gly Gly Ile His Gln Val Thr Val Asn Glu Ser Leu Leu
          100          105          110
Ala Pro Leu Asn Val Glu Leu Asp Pro Glu Ile Gln Lys Val Arg Ala
          115          120          125

```

Gln Glu Arg Glu Gln Ile Lys Ala Leu Asn Asn Lys Phe Ala Ser Phe
 130 135 140
 Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Gln Val Leu Glu Thr
 145 150 155 160
 Lys Trp Glu Leu Leu Gln Gln Leu Asp Leu Asn Asn Cys Lys Asn Asn
 165 170 175
 Leu Glu Pro Ile Leu Glu Gly Tyr Ile Ser Asn Leu Arg Lys Gln Leu
 180 185 190
 Glu Thr Leu Ser Gly Asp Arg Val Arg Leu Asp Ser Glu Leu Arg Asn
 195 200 205
 Val Arg Asp Val Val Glu Asp Tyr Lys Lys Arg Tyr Glu Glu Glu Ile
 210 215 220
 Asn Lys Arg Thr Ala Ala Glu Asn Glu Phe Val Leu Leu Lys Lys Asp
 225 230 235 240
 Val Asp Ala Ala Tyr Ala Asn Lys Val Glu Leu Gln Ala Lys Val Glu
 245 250 255
 Ser Met Asp Gln Glu Ile Lys Phe Phe Arg Cys Leu Phe Glu Ala Glu
 260 265 270
 Ile Thr Gln Ile Gln Ser His Ile Ser Asp Met Ser Val Ile Leu Ser
 275 280 285
 Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile Asp Glu Val
 290 295 300
 Arg Thr Gln Tyr Glu Glu Ile Ala Leu Lys Ser Lys Ala Glu Ala Glu
 305 310 315 320
 Ala Leu Tyr Gln Thr Lys Phe Gln Glu Leu Gln Leu Ala Ala Gly Arg
 325 330 335
 His Gly Asp Asp Leu Lys Asn Thr Lys Asn Glu Ile Ser Glu Leu Thr
 340 345 350
 Arg Leu Ile Gln Arg Ile Arg Ser Glu Ile Glu Asn Val Lys Lys Gln
 355 360 365
 Ala Ser Asn Leu Glu Thr Ala Ile Ala Asp Ala Glu Gln Arg Gly Asp
 370 375 380
 Asn Ala Leu Lys Asp Ala Arg Ala Lys Leu Asp Glu Leu Glu Gly Ala
 385 390 395 400
 Leu His Gln Ala Lys Glu Glu Leu Ala Arg Met Leu Arg Glu Tyr Gln
 405 410 415
 Glu Leu Met Ser Leu Lys Leu Ala Leu Asp Met Glu Ile Ala Thr Tyr
 420 425 430
 Arg Lys Leu Leu Glu Ser Glu Glu Cys Arg Met Ser Gly Glu Phe Pro
 435 440 445
 Ser Pro Val Ser Ile Ser Ile Ile Ser Ser Thr Ser Gly Gly Ser Val
 450 455 460
 Tyr Gly Phe Arg Pro Ser Met Val Ser Gly Gly Tyr Val Ala Asn Ser
 465 470 475 480
 Ser Asn Cys Ile Ser Gly Val Cys Ser Val Arg Gly Gly Glu Gly Arg
 485 490 495
 Ser Arg Gly Ser Ala Asn Asp Tyr Lys Asp Thr Leu Gly Lys Gly Ser
 500 505 510
 Ser Leu Ser Ala Pro Ser Lys Lys Thr Ser Arg
 515 520
 <210> 459
 <211> 529
 <212> PRT
 <213> Homo sapiens
 <400> 459
 Met Ser Arg Gln Leu Asn Ile Lys Ser Ser Gly Asp Lys Gly Asn Phe
 1 5 10 15
 Ser Val His Ser Ala Val Val Pro Arg Lys Ala Val Gly Ser Leu Ala
 20 25 30

Ser Tyr Cys Ala Ala Gly Arg Gly Ala Gly Ala Gly Phe Gly Ser Arg
 35 40 45
 Ser Leu Tyr Ser Leu Gly Gly Asn Arg Arg Ile Ser Phe Asn Val Ala
 50 55 60
 Gly Gly Gly Val Arg Ala Gly Gly Tyr Gly Phe Arg Pro Gly Ser Gly
 65 70 75 80
 Tyr Gly Gly Gly Arg Ala Ser Gly Phe Ala Gly Ser Met Phe Gly Ser
 85 90 95
 Val Ala Leu Gly Pro Ala Cys Leu Ser Val Cys Pro Pro Gly Gly Ile
 100 105 110
 His Gln Val Thr Val Asn Lys Ser Leu Leu Ala Pro Leu Asn Val Glu
 115 120 125
 Leu Asp Pro Glu Ile Gln Lys Val Arg Ala Gln Glu Arg Glu Gln Ile
 130 135 140
 Lys Val Leu Asn Asp Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe
 145 150 155 160
 Leu Glu Gln Gln Asn Gln Val Leu Glu Thr Lys Trp Glu Leu Leu Gln
 165 170 175
 Gln Leu Asp Leu Asn Asn Cys Lys Lys Asn Leu Glu Pro Ile Leu Glu
 180 185 190
 Gly Tyr Ile Ser Asn Leu Arg Lys Gln Leu Glu Thr Leu Ser Gly Asp
 195 200 205
 Arg Val Arg Leu Asp Ser Glu Leu Arg Ser Met Arg Asp Leu Val Glu
 210 215 220
 Asp Tyr Lys Lys Arg Tyr Glu Val Glu Ile Asn Arg Arg Thr Thr Ala
 225 230 235 240
 Glu Asn Glu Phe Val Val Leu Lys Lys Asp Ala Asp Ala Tyr Ala
 245 250 255
 Val Lys Val Glu Leu Gln Ala Lys Val Asp Ser Leu Asp Lys Asp Ile
 260 265 270
 Lys Phe Leu Lys Cys Leu Tyr Asp Ala Glu Ile Ala Gln Ile Gln Thr
 275 280 285
 His Ala Ser Glu Thr Ser Val Ile Leu Ser Met Asp Asn Asn Arg Asp
 290 295 300
 Leu Asp Leu Asp Ser Ile Ile Ala Glu Val Arg Met His Tyr Glu Glu
 305 310 315 320
 Ile Ala Leu Lys Ser Lys Ala Glu Ala Glu Ala Leu Tyr Gln Thr Lys
 325 330 335
 Ile Gln Glu Leu Gln Leu Ala Ala Ser Arg His Gly Asp Asp Leu Lys
 340 345 350
 His Thr Arg Ser Glu Met Val Glu Leu Asn Arg Leu Ile Gln Arg Ile
 355 360 365
 Arg Cys Glu Ile Gly Asn Val Lys Lys Gln Arg Ala Ser Leu Glu Thr
 370 375 380
 Ala Ile Ala Asp Ala Glu Gln Arg Gly Asp Asn Ala Leu Lys Asp Ala
 385 390 395 400
 Gln Ala Lys Leu Asp Glu Leu Glu Gly Ala Leu His Gln Ala Lys Glu
 405 410 415
 Glu Leu Ala Arg Met Leu Arg Glu Tyr Gln Glu Leu Met Ser Leu Lys
 420 425 430
 Leu Ala Leu Asp Met Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly
 435 440 445
 Glu Glu Cys Arg Met Ser Gly Glu Asn Pro Ser Ser Val Ser Ile Ser
 450 455 460
 Val Ile Ser Ser Ser Ser Tyr Ser Tyr His His Pro Ser Ser Ala Gly
 465 470 475 480
 Val Asp Leu Gly Ala Ser Ala Val Ala Gly Ser Ser Gly Ser Thr Gln
 485 490 495
 Ser Gly Gln Thr Lys Thr Thr Glu Ala Arg Gly Gly Asp Leu Lys Asp
 500 505 510
 Thr Gln Gly Lys Ser Thr Pro Ala Ser Ile Pro Ala Arg Lys Ala Thr
 515 520 525
 Arg

<211> 511

<212> PRT

<213> Homo sapiens

<400> 460

```

Met Ser Arg Gln Leu Thr His Phe Pro Arg Gly Glu Arg Leu Gly Phe
1          5          10          15
Ser Gly Cys Ser Ala Val Leu Ser Gly Ile Gly Ser Ser Ser Ala
20          25          30
Ser Phe Arg Ala Arg Val Lys Gly Ser Ala Ser Phe Gly Ser Lys Ser
35          40          45
Leu Ser Cys Leu Gly Gly Ser Arg Ser Leu Ala Leu Ser Ala Ala Ala
50          55          60
Arg Arg Gly Gly Gly Arg Leu Gly Gly Phe Val Gly Thr Ala Phe Gly
65          70          75          80
Ser Ala Gly Leu Gly Pro Lys Cys Pro Ser Val Cys Pro Pro Gly Gly
85          90          95
Ile Pro Gln Val Thr Val Asn Lys Ser Leu Leu Ala Pro Leu Asn Val
100         105         110
Glu Met Asp Pro Glu Ile Gln Arg Val Arg Ala Gln Glu Arg Glu Gln
115         120         125
Ile Lys Ala Leu Asn Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg
130         135         140
Phe Leu Glu Gln Gln Asn Gln Val Leu Glu Thr Lys Trp Asn Leu Leu
145         150         155         160
Gln Gln Leu Asp Leu Asn Asn Cys Arg Lys Asn Leu Glu Pro Ile Tyr
165         170         175
Glu Gly Tyr Ile Ser Asn Leu Gln Lys Gln Leu Glu Met Leu Ser Gly
180         185         190
Asp Gly Val Arg Leu Asp Ser Glu Leu Arg Asn Met Gln Asp Leu Val
195         200         205
Glu Asp Tyr Lys Lys Arg Tyr Glu Val Glu Ile Asn Arg Arg Thr Ala
210         215         220
Ala Glu Asn Glu Phe Val Val Leu Lys Lys Asp Val Asp Ala Ala Tyr
225         230         235         240
Met Asn Lys Val Glu Leu Gln Ala Lys Val Asp Ser Leu Thr Asp Glu
245         250         255
Ile Lys Phe Phe Lys Cys Leu Tyr Glu Gly Glu Ile Thr Gln Ile Gln
260         265         270
Ser His Ile Ser Asp Thr Ser Ile Val Leu Ser Met Asp Asn Asn Arg
275         280         285
Asp Leu Asp Leu Asp Ser Ile Ile Ala Glu Val Arg Ala Gln Tyr Glu
290         295         300
Glu Ile Ala Leu Lys Ser Lys Ala Glu Ala Glu Thr Leu Tyr Gln Thr
305         310         315         320
Lys Ile Gln Glu Leu Gln Val Thr Ala Gly Gln His Gly Asp Asp Leu
325         330         335
Lys Leu Thr Lys Ala Glu Ile Ser Glu Leu Asn Arg Leu Ile Gln Arg
340         345         350
Ile Arg Ser Glu Ile Gly Asn Val Lys Lys Gln Cys Ala Asp Leu Glu
355         360         365
Thr Ala Ile Ala Asp Ala Glu Gln Arg Gly Asp Cys Ala Leu Lys Asp
370         375         380
Ala Arg Ala Lys Leu Asp Glu Leu Glu Gly Ala Leu His Gln Ala Lys
385         390         395         400
Glu Glu Leu Ala Arg Met Leu Arg Glu Tyr Gln Glu Leu Val Ser Leu
405         410         415
Lys Leu Ala Leu Asp Met Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu
420         425         430
Ser Glu Glu Cys Arg Met Ser Gly Glu Tyr Pro Asn Ser Val Ser Ile
435         440         445

```

Ser Val Ile Ser Ser Thr Asn Ala Gly Ala Gly Gly Ala Gly Phe Ser
 450 455 460
 Met Gly Phe Gly Ala Ser Ser Ser Tyr Ser Tyr Lys Thr Ala Ala Ala
 465 470 475 480
 Asp Val Lys Thr Lys Gly Ser Cys Gly Ser Glu Leu Lys Asp Pro Leu
 485 490 495
 Ala Lys Thr Ser Gly Ser Ser Cys Ala Thr Lys Lys Ala Ser Arg
 500 505 510
 <210> 461
 <211> 540
 <212> PRT
 <213> Homo sapiens

<400> 461
 Met Ser Arg Gln Phe Thr Tyr Lys Ser Gly Ala Ala Ala Lys Gly Gly
 1 5 10 15
 Phe Ser Gly Cys Ser Ala Val Leu Ser Gly Gly Ser Ser Ser Ser Tyr
 20 25 30
 Arg Ala Gly Gly Lys Gly Leu Ser Gly Gly Phe Ser Ser Arg Ser Leu
 35 40 45
 Tyr Ser Leu Gly Gly Ala Arg Ser Ile Ser Phe Asn Val Ala Ser Gly
 50 55 60
 Ser Gly Trp Ala Gly Gly Tyr Gly Phe Gly Arg Gly Arg Ala Ser Gly
 65 70 75 80
 Phe Ala Gly Ser Met Phe Gly Ser Val Ala Leu Gly Ser Val Cys Pro
 85 90 95
 Ser Leu Cys Pro Pro Gly Gly Ile His Gln Val Thr Ile Asn Lys Ser
 100 105 110
 Leu Leu Ala Pro Leu Asn Val Glu Leu Asp Pro Glu Ile Gln Lys Val
 115 120 125
 Arg Ala Gln Glu Arg Glu Gln Ile Lys Val Leu Asn Asn Lys Phe Ala
 130 135 140
 Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Gln Val Leu
 145 150 155 160
 Glu Thr Lys Trp Glu Leu Leu Gln Gln Leu Asp Leu Asn Asn Cys Lys
 165 170 175
 Asn Asn Leu Glu Pro Ile Leu Glu Gly Tyr Ile Ser Asn Leu Arg Lys
 180 185 190
 Gln Leu Glu Thr Leu Ser Gly Asp Arg Val Arg Leu Asp Ser Glu Leu
 195 200 205
 Arg Ser Val Arg Glu Val Val Glu Asp Tyr Lys Lys Arg Tyr Glu Glu
 210 215 220
 Glu Ile Asn Lys Arg Thr Thr Ala Glu Asn Glu Phe Val Val Leu Lys
 225 230 235 240
 Lys Asp Val Asp Ala Ala Tyr Thr Ser Lys Val Glu Leu Gln Ala Lys
 245 250 255
 Val Asp Ala Leu Asp Gly Glu Ile Lys Phe Phe Lys Cys Leu Tyr Glu
 260 265 270
 Gly Glu Thr Ala Gln Ile Gln Ser His Ile Ser Asp Thr Ser Ile Ile
 275 280 285
 Leu Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile Ala
 290 295 300
 Glu Val Arg Ala Gln Tyr Glu Glu Ile Ala Arg Lys Ser Lys Ala Glu
 305 310 315 320
 Ala Glu Ala Leu Tyr Gln Thr Lys Phe Gln Glu Leu Gln Leu Ala Ala
 325 330 335
 Gly Arg His Gly Asp Asp Leu Lys His Thr Lys Asn Glu Ile Ser Glu
 340 345 350
 Leu Thr Arg Leu Ile Gln Arg Leu Arg Ser Glu Ile Glu Ser Val Lys
 355 360 365

Lys Gln Cys Ala Asn Leu Glu Thr Ala Ile Ala Asp Ala Glu Gln Arg
 370 375 380
 Gly Asp Cys Ala Leu Lys Asp Ala Arg Ala Lys Leu Asp Glu Leu Glu
 385 390 395 400
 Gly Ala Leu Gln Gln Ala Lys Glu Glu Leu Ala Arg Met Leu Arg Glu
 405 410 415
 Tyr Gln Glu Leu Leu Ser Val Lys Leu Ser Leu Asp Ile Glu Ile Ala
 420 425 430
 Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Met Ser Gly Glu
 435 440 445
 Tyr Thr Asn Ser Val Ser Ile Ser Val Ile Asn Ser Ser Met Ala Gly
 450 455 460
 Met Ala Gly Thr Gly Ala Gly Phe Gly Phe Ser Asn Ala Gly Thr Tyr
 465 470 475 480
 Gly Tyr Trp Pro Ser Ser Val Ser Gly Gly Tyr Ser Met Leu Pro Gly
 485 490 495
 Gly Cys Val Thr Gly Ser Gly Asn Cys Ser Pro Arg Gly Glu Ala Arg
 500 505 510
 Thr Arg Leu Gly Ser Ala Ser Glu Phe Arg Asp Ser Gln Gly Lys Thr
 515 520 525
 Leu Ala Leu Ser Ser Pro Thr Lys Lys Thr Met Arg
 530 535 540
 <210> 462
 <211> 645
 <212> PRT
 <213> Homo sapiens

<400> 462
 Met Ser Cys Gln Ile Ser Cys Lys Ser Arg Gly Arg Gly Gly Gly Gly
 1 5 10 15
 Gly Gly Phe Arg Gly Phe Ser Ser Gly Ser Ala Val Val Ser Gly Gly
 20 25 30
 Ser Arg Arg Ser Thr Ser Ser Phe Ser Cys Leu Ser Arg His Gly Gly
 35 40 45
 Gly Gly Gly Gly Phe Gly Gly Gly Gly Phe Gly Ser Arg Ser Leu Val
 50 55 60
 Gly Leu Gly Gly Thr Lys Ser Ile Ser Ile Ser Val Ala Gly Gly Gly
 65 70 75 80
 Gly Gly Phe Gly Ala Gly Gly Phe Gly Gly Arg Gly Gly Gly Phe
 85 90 95
 Gly Gly Gly Ser Gly Phe Gly Gly Gly Ser Gly Phe Gly Gly Gly Ser
 100 105 110
 Gly Phe Ser Gly Gly Gly Phe Gly Gly Gly Gly Phe Gly Gly Gly Arg
 115 120 125
 Phe Gly Gly Phe Gly Gly Pro Gly Gly Val Gly Gly Leu Gly Gly Pro
 130 135 140
 Gly Gly Phe Gly Pro Gly Gly Tyr Pro Gly Gly Ile His Glu Val Ser
 145 150 155 160
 Val Asn Gln Ser Leu Leu Gln Pro Leu Asn Val Lys Val Asp Pro Glu
 165 170 175
 Ile Gln Asn Val Lys Ala Gln Glu Arg Glu Gln Ile Lys Thr Leu Asn
 180 185 190
 Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln
 195 200 205
 Asn Gln Val Leu Gln Thr Lys Trp Glu Leu Leu Gln Gln Met Asn Val
 210 215 220
 Gly Thr Arg Pro Ile Asn Leu Glu Pro Ile Phe Gln Gly Tyr Ile Asp
 225 230 235 240
 Ser Leu Lys Arg Tyr Leu Asp Gly Leu Thr Ala Glu Arg Thr Ser Gln
 245 250 255


```

<400> 463
Met Ser Arg Gln Phe Ser Ser Arg Ser Gly Tyr Arg Ser Gly Gly Gly
1          5          10          15
Phe Ser Ser Gly Ser Ala Gly Ile Ile Asn Tyr Gln Arg Arg Thr Thr
20          25          30

```

Ser Ser Ser Thr Arg Arg Ser Gly Gly Gly Gly Gly Arg Phe Ser Ser
 35 40 45
 Cys Gly Gly Gly Gly Gly Ser Phe Gly Ala Gly Gly Gly Phe Gly Ser
 50 55 60
 Arg Ser Leu Val Asn Leu Gly Gly Ser Lys Ser Ile Ser Ile Ser Val
 65 70 75 80
 Ala Arg Gly Gly Gly Arg Gly Ser Gly Phe Gly Gly Gly Tyr Gly Gly
 85 90 95
 Gly Gly Phe Gly Gly Gly Gly Phe Gly Gly Gly Gly Phe Gly Gly Gly
 100 105 110
 Gly Ile Gly Gly Gly Gly Phe Gly Gly Phe Gly Ser Gly Gly Gly Gly
 115 120 125
 Phe Gly Gly Gly Gly Phe Gly Gly Gly Gly Tyr Gly Gly Gly Tyr Gly
 130 135 140
 Pro Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr Ile Asn Gln Ser
 145 150 155 160
 Leu Leu Gln Pro Leu Asn Val Glu Ile Asp Pro Glu Ile Gln Lys Val
 165 170 175
 Lys Ser Arg Glu Arg Glu Gln Ile Lys Ser Leu Asn Asn Gln Phe Ala
 180 185 190
 Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Gln Val Leu
 195 200 205
 Gln Thr Lys Trp Glu Leu Leu Gln Gln Val Asp Thr Ser Thr Arg Thr
 210 215 220
 His Asn Leu Glu Pro Tyr Phe Glu Ser Phe Ile Asn Asn Leu Arg Arg
 225 230 235 240
 Arg Val Asp Gln Leu Lys Ser Asp Gln Ser Arg Leu Asp Ser Glu Leu
 245 250 255
 Lys Asn Met Gln Asp Met Val Glu Asp Tyr Arg Asn Lys Tyr Glu Asp
 260 265 270
 Glu Ile Asn Lys Arg Thr Asn Ala Glu Asn Glu Phe Val Thr Ile Lys
 275 280 285
 Lys Asp Val Asp Gly Ala Tyr Met Thr Lys Val Asp Leu Gln Ala Lys
 290 295 300
 Leu Asp Asn Leu Gln Gln Glu Ile Asp Phe Leu Thr Ala Leu Tyr Gln
 305 310 315 320
 Ala Glu Leu Ser Gln Met Gln Thr Gln Ile Ser Glu Thr Asn Val Ile
 325 330 335
 Leu Ser Met Asp Asn Asn Arg Ser Leu Asp Leu Asp Ser Ile Ile Ala
 340 345 350
 Glu Val Lys Ala Gln Tyr Glu Asp Ile Ala Gln Lys Ser Lys Ala Glu
 355 360 365
 Ala Glu Ser Leu Tyr Gln Ser Lys Tyr Glu Glu Leu Gln Ile Thr Ala
 370 375 380
 Gly Arg His Gly Asp Ser Val Arg Asn Ser Lys Ile Glu Ile Ser Glu
 385 390 395 400
 Leu Asn Arg Val Ile Gln Arg Leu Arg Ser Glu Ile Asp Asn Val Lys
 405 410 415
 Lys Gln Ile Ser Asn Leu Gln Gln Ser Ile Ser Asp Ala Glu Gln Arg
 420 425 430
 Gly Glu Asn Ala Leu Lys Asp Ala Lys Asn Lys Leu Asn Asp Leu Glu
 435 440 445
 Asp Ala Leu Gln Gln Ala Lys Glu Asp Leu Ala Arg Leu Leu Arg Asp
 450 455 460
 Tyr Gln Glu Leu Met Asn Thr Lys Leu Ala Leu Asp Leu Glu Ile Ala
 465 470 475 480
 Thr Tyr Arg Thr Leu Glu Gly Glu Glu Ser Arg Met Ser Gly Glu
 485 490 495
 Cys Ala Pro Asn Val Ser Val Ser Val Ser Thr Ser His Thr Thr Ile
 500 505 510
 Ser Gly Gly Gly Ser Arg Gly Gly Gly Gly Gly Tyr Gly Ser Gly
 515 520 525
 Gly Ser Ser Tyr Gly Ser Gly Gly Gly Ser Tyr Gly Ser Gly Gly Gly
 530 535 540
 Gly Gly Gly Gly Arg Gly Ser Tyr Gly Ser Gly Gly Ser Ser Tyr Gly
 545 550 555 560

<213> Homo sapiens

Met 1	Ser	Arg	Gln 5	Ala	Ser	Lys	Thr	Ser	Gly 10	Gly	Gly	Ser	Gln	Gly 15	Phe
Ser	Gly	Arg	Ser 20	Ala	Val	Val	Ser	Gly 25	Ser	Ser	Arg	Met	Ser 30	Cys	Val
Ala	His	Ser 35	Gly	Gly	Ala	Gly	Gly 40	Gly	Ala	Tyr	Gly	Phe 45	Arg	Ser	Gly
Ala	Gly	Gly	Phe	Gly	Ser	Arg	Ser 55	Leu	Tyr	Asn	Leu 60	Gly	Gly	Asn	Lys
Ser 65	Ile	Ser	Ile	Ser	Val 70	Ala	Ala	Gly	Gly	Ser 75	Arg	Ala	Gly	Gly	Phe 80
Gly	Gly	Gly	Arg	Ser 85	Ser	Cys	Ala	Phe 90	Ala	Gly	Gly	Tyr	Gly 95	Gly	Gly
Phe	Gly	Ser	Gly 100	Tyr	Gly	Gly	Gly 105	Phe	Gly	Gly	Gly	Phe 110	Gly	Gly	Gly
Arg	Gly	Met 115	Gly	Gly	Gly	Phe	Gly 120	Gly	Ala	Gly	Gly	Phe 125	Gly	Gly	Ala
Gly	Gly	Phe	Gly	Gly	Ala 135	Gly	Gly	Phe	Gly	Gly	Pro 140	Gly	Gly	Phe	Gly
Gly 145	Ser	Gly	Gly	Phe	Gly 150	Gly	Pro	Gly	Ser	Leu 155	Gly	Ser	Pro	Gly	Gly
Phe	Ala	Pro	Gly	Gly 165	Phe	Pro	Gly	Gly	Ile 170	Gln	Glu	Val	Thr 175	Thr	Asn
Gln	Ser	Leu	Leu 180	Gln	Pro	Leu	Lys	Val 185	Glu	Thr	Asp	Pro	Gln 190	Ile	Gly
Gln	Val	Lys 195	Ala	Gln	Glu	Arg	Glu 200	Gln	Ile	Lys	Thr	Leu 205	Asn	Asn	Lys
Phe	Ala	Ser 210	Phe	Ile	Asp	Lys 215	Val	Arg	Phe	Leu	Glu 220	Gln	Gln	Asn	Lys
Val 225	Leu	Glu	Thr	Lys	Trp 230	Asn	Leu	Leu	Gln	Gln	Gln	Gly	Thr	Ser	Ser
Ile	Ser	Gly	Thr	Asn 245	Asn	Leu	Glu	Pro	Leu 250	Phe	Glu	Asn	His 255	Ile	Asn
Tyr	Leu	Arg	Ser 260	Tyr	Leu	Asp	Asn	Ile 265	Leu	Gly	Glu	Arg	Gly 270	Arg	Leu
Asp	Ser	Glu 275	Leu	Lys	Asn	Met	Glu 280	Asp	Leu	Val	Glu	Asp 285	Phe	Lys	Lys
Lys	Tyr 290	Glu	Asp	Glu	Ile	Asn 295	Lys	Arg	Thr	Ala	Ala 300	Glu	Asn	Glu	Phe
Val 305	Thr	Leu	Lys	Lys	Asp 310	Val	Asp	Ser	Ala	Tyr 315	Met	Asn	Lys	Val	Glu
Leu	Gln	Ala	Lys	Val 325	Asp	Ala	Leu	Ile 330	Asp	Glu	Ile	Asp	Phe 335	Leu	Arg

Thr Leu Tyr Asp Ala Glu Leu Ser Gln Met Gln Ser His Ile Ser Asp
 340 345 350
 Thr Ser Val Val Leu Ser Met Asp Asn Asn Arg Ser Leu Asp Leu Asp
 355 360 365
 Ser Ile Ile Ala Glu Val Gly Ala Gln Tyr Glu Asp Ile Ala Gln Arg
 370 375 380
 Ser Lys Ala Glu Ala Glu Ala Leu Tyr Gln Thr Lys Leu Gly Glu Leu
 385 390 395 400
 Gln Thr Thr Ala Gly Arg His Gly Asp Asp Leu Arg Asn Thr Lys Ser
 405 410 415
 Glu Ile Ile Glu Leu Asn Arg Met Ile Gln Arg Leu Arg Ala Glu Ile
 420 425 430
 Glu Gly Val Lys Lys Gln Asn Ala Asn Leu Gln Thr Ala Ile Ala Gln
 435 440 445
 Ala Glu Gln His Gly Glu Met Ala Leu Lys Asp Ala Asn Ala Lys Leu
 450 455 460
 Gln Glu Leu Gln Ala Ala Leu Gln Gln Ala Lys Asp Asp Leu Ala Arg
 465 470 475 480
 Leu Leu Arg Asp Tyr Gln Glu Leu Met Asn Val Lys Leu Ala Leu Asp
 485 490 495
 Val Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Tyr Ser
 500 505 510
 Arg Met Ser Gly Glu Cys Pro Ser Ala Val Ser Ile Ser Val Val Ser
 515 520 525
 Ser Ser Thr Thr Ser Ala Ser Ala Gly Gly Tyr Gly Gly Gly Tyr Gly
 530 535 540
 Gly Gly Met Gly Gly Gly Leu Gly Gly Gly Phe Ser Ala Gly Gly Gly
 545 550 555 560
 Ser Gly Ile Gly Phe Gly Arg Gly Gly Gly Gly Gly Ile Gly Gly Gly
 565 570 575
 Phe Gly Gly Gly Thr Ser Gly Phe Ser Gly Gly Ser Gly Phe Gly Ser
 580 585 590
 Ile Ser Gly Ala Arg Tyr Gly Val Ser Gly Gly Gly Phe Ser Ser Ala
 595 600 605
 Ser Asn Arg Gly Gly Ser Ile Lys Phe Ser Gln Ser Ser Gln Ser Ser
 610 615 620
 Gln Arg Tyr Ser Arg
 625
 <210> 465
 <211> 534
 <212> PRT
 <213> Homo sapiens

<400> 465
 Met Ile Ala Arg Gln Gln Cys Val Arg Gly Gly Pro Arg Gly Phe Ser
 1 5 10 15
 Cys Gly Ser Ala Ile Val Gly Gly Gly Lys Arg Gly Ala Phe Ser Ser
 20 25 30
 Val Ser Met Ser Gly Gly Ala Gly Arg Cys Ser Ser Gly Gly Phe Gly
 35 40 45
 Ser Arg Ser Leu Tyr Asn Leu Arg Gly Asn Lys Ser Ile Ser Met Ser
 50 55 60
 Val Ala Gly Ser Arg Gln Gly Ala Cys Phe Gly Gly Ala Gly Gly Phe
 65 70 75 80
 Gly Thr Gly Gly Phe Gly Ala Gly Gly Phe Gly Ala Gly Phe Gly Thr
 85 90 95
 Gly Gly Phe Gly Gly Gly Phe Gly Gly Ser Phe Ser Gly Lys Gly Gly
 100 105 110
 Pro Gly Phe Pro Val Cys Pro Ala Gly Gly Ile Gln Glu Val Thr Ile
 115 120 125

Asn Gln Ser Leu Leu Thr Pro Leu His Val Glu Ile Asp Pro Glu Ile
 130 135 140
 Gln Lys Val Arg Thr Glu Glu Arg Glu Gln Ile Lys Leu Leu Asn Asn
 145 150 155 160
 Lys Phe Ala Ser Phe Ile Asp Lys Val Gln Phe Leu Glu Gln Gln Asn
 165 170 175
 Lys Val Leu Glu Thr Lys Trp Asn Leu Leu Gln Gln Gln Thr Thr Thr
 180 185 190
 Thr Ser Ser Lys Asn Leu Glu Pro Leu Phe Glu Thr Tyr Leu Ser Val
 195 200 205
 Leu Arg Lys Gln Leu Asp Thr Leu Gly Asn Asp Lys Gly Arg Leu Gln
 210 215 220
 Ser Glu Leu Lys Thr Met Gln Asp Ser Val Glu Asp Phe Lys Thr Lys
 225 230 235 240
 Tyr Glu Glu Glu Ile Asn Lys Arg Thr Ala Ala Glu Asn Asp Phe Val
 245 250 255
 Val Leu Lys Lys Asp Val Asp Ala Ala Tyr Leu Asn Lys Val Glu Leu
 260 265 270
 Glu Ala Lys Val Asp Ser Leu Asn Asp Glu Ile Asn Phe Leu Lys Val
 275 280 285
 Leu Tyr Asp Ala Glu Leu Ser Gln Met Gln Thr His Val Ser Asp Thr
 290 295 300
 Ser Val Val Leu Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser
 305 310 315 320
 Ile Ile Ala Glu Val Arg Ala Gln Tyr Glu Glu Ile Ala Gln Arg Ser
 325 330 335
 Lys Ala Glu Ala Glu Ala Leu Tyr Gln Thr Lys Val Gln Gln Leu Gln
 340 345 350
 Ile Ser Val Asp Gln His Gly Asp Asn Leu Lys Asn Thr Lys Ser Glu
 355 360 365
 Ile Ala Glu Leu Asn Arg Met Ile Gln Arg Leu Arg Ala Glu Ile Glu
 370 375 380
 Asn Ile Lys Lys Gln Cys Gln Thr Leu Gln Val Ser Val Ala Asp Ala
 385 390 395 400
 Glu Gln Arg Gly Glu Asn Ala Leu Lys Asp Ala His Ser Lys Arg Val
 405 410 415
 Glu Leu Glu Ala Ala Leu Gln Gln Ala Lys Glu Glu Leu Ala Arg Met
 420 425 430
 Leu Arg Glu Tyr Gln Glu Leu Met Ser Val Lys Leu Ala Leu Asp Ile
 435 440 445
 Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Tyr Arg Met
 450 455 460
 Ser Gly Glu Cys Gln Ser Ala Val Ser Ile Ser Val Val Ser Gly Ser
 465 470 475 480
 Thr Ser Thr Gly Gly Ile Ser Gly Gly Leu Gly Ser Gly Ser Gly Phe
 485 490 495
 Gly Leu Ser Ser Gly Phe Gly Ser Gly Ser Gly Ser Gly Phe Phe
 500 505 510
 Gly Gly Ser Val Ser Gly Ser Ser Ser Lys Ile Ile Ser Thr Thr
 515 520 525
 Thr Leu Asn Lys Arg Arg
 530
 <210> 466
 <211> 483
 <212> PRT
 <213> Homo sapiens
 <400> 466
 Met Ser Ile Arg Val Thr Gln Lys Ser Tyr Lys Val Ser Thr Ser Gly
 1 5 10 15

Pro Arg Ala Phe Ser Ser Arg Ser Tyr Thr Ser Gly Pro Gly Ser Arg
 20 25 30
 Ile Ser Ser Ser Ser Phe Ser Arg Val Gly Ser Ser Asn Phe Arg Gly
 35 40 45
 Gly Leu Gly Gly Gly Tyr Gly Gly Ala Ser Gly Met Gly Gly Ile Thr
 50 55 60
 Ala Val Thr Val Asn Gln Ser Leu Leu Ser Pro Leu Val Leu Glu Val
 65 70 75 80
 Asp Pro Asn Ile Gln Ala Val Arg Thr Gln Glu Lys Glu Gln Ile Lys
 85 90 95
 Thr Leu Asn Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu
 100 105 110
 Glu Gln Gln Asn Lys Met Leu Glu Thr Lys Trp Ser Leu Leu Gln Gln
 115 120 125
 Gln Lys Thr Ala Arg Ser Asn Met Asp Asn Met Phe Glu Ser Tyr Ile
 130 135 140
 Asn Asn Leu Arg Arg Gln Leu Glu Thr Leu Gly Gln Glu Lys Leu Lys
 145 150 155 160
 Leu Glu Ala Glu Leu Gly Asn Met Gln Gly Leu Val Glu Asp Phe Lys
 165 170 175
 Asn Lys Tyr Glu Asp Glu Ile Asn Lys Arg Thr Glu Met Glu Asn Glu
 180 185 190
 Phe Val Leu Ile Lys Lys Asp Val Asp Glu Ala Tyr Met Asn Lys Val
 195 200 205
 Glu Leu Glu Ser Arg Leu Glu Gly Leu Thr Asp Glu Ile Asn Phe Leu
 210 215 220
 Arg Gln Leu Tyr Glu Glu Glu Ile Arg Glu Leu Gln Ser Gln Ile Ser
 225 230 235 240
 Asp Thr Ser Val Val Leu Ser Met Asp Asn Ser Arg Ser Leu Asp Met
 245 250 255
 Asp Ser Ile Ile Ala Glu Val Lys Ala Gln Tyr Glu Asp Ile Ala Asn
 260 265 270
 Arg Ser Arg Ala Glu Ala Glu Ser Met Tyr Gln Ile Lys Tyr Glu Glu
 275 280 285
 Leu Gln Ser Leu Ala Gly Lys His Gly Asp Asp Leu Arg Arg Thr Lys
 290 295 300
 Thr Glu Ile Ser Glu Met Asn Arg Asn Ile Ser Arg Leu Gln Ala Glu
 305 310 315 320
 Ile Glu Gly Leu Lys Gly Gln Arg Ala Ser Leu Glu Ala Ala Ile Ala
 325 330 335
 Asp Ala Glu Gln Arg Gly Glu Leu Ala Ile Lys Asp Ala Asn Ala Lys
 340 345 350
 Leu Ser Glu Leu Glu Ala Ala Leu Gln Arg Ala Lys Gln Asp Met Ala
 355 360 365
 Arg Gln Leu Arg Glu Tyr Gln Glu Leu Met Asn Val Lys Leu Ala Leu
 370 375 380
 Asp Ile Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Ser
 385 390 395 400
 Arg Leu Glu Ser Gly Met Gln Asn Met Ser Ile His Thr Lys Thr Thr
 405 410 415
 Ser Gly Tyr Ala Gly Gly Leu Ser Ser Ala Tyr Gly Gly Leu Thr Ser
 420 425 430
 Pro Gly Leu Ser Tyr Ser Leu Gly Ser Ser Phe Gly Ser Gly Ala Gly
 435 440 445
 Ser Ser Ser Phe Ser Arg Thr Ser Ser Ser Arg Ala Val Val Val Lys
 450 455 460
 Lys Ile Glu Thr Arg Asp Gly Lys Leu Val Ser Glu Ser Ser Asp Val
 465 470 475 480
 Leu Pro Lys

<210> 467

<211> 430

<212> PRT

<213> Homo sapiens

<400> 467

```

Met Ser Phe Thr Thr Arg Ser Thr Phe Ser Thr Asn Tyr Arg Ser Leu
1      5      10      15
Gly Ser Val Gln Ala Pro Ser Tyr Gly Ala Arg Pro Val Ser Ser Ala
20      25      30
Ala Ser Val Tyr Ala Gly Ala Gly Gly Ser Gly Ser Arg Ile Ser Val
35      40      45
Ser Arg Ser Thr Ser Phe Arg Gly Gly Met Gly Ser Gly Gly Leu Ala
50      55      60
Thr Gly Ile Ala Gly Gly Leu Ala Gly Met Gly Gly Ile Gln Asn Glu
65      70      75      80
Lys Glu Thr Met Gln Ser Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp
85      90      95
Arg Val Arg Ser Leu Glu Thr Glu Asn Arg Arg Leu Glu Ser Lys Ile
100     105     110
Arg Glu His Leu Glu Lys Lys Gly Pro Gln Val Arg Asp Trp Ser His
115     120     125
Tyr Phe Lys Ile Ile Glu Asp Leu Arg Ala Gln Ile Phe Ala Asn Thr
130     135     140
Val Asp Asn Ala Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu Ala
145     150     155     160
Ala Asp Asp Phe Arg Val Lys Tyr Glu Thr Glu Leu Ala Met Arg Gln
165     170     175
Ser Val Glu Asn Asp Ile His Gly Leu Arg Lys Val Ile Asp Asp Thr
180     185     190
Asn Ile Thr Arg Leu Gln Leu Glu Thr Glu Ile Glu Ala Leu Lys Glu
195     200     205
Glu Leu Leu Phe Met Lys Lys Asn His Glu Glu Glu Val Lys Gly Leu
210     215     220
Gln Ala Gln Ile Ala Ser Ser Gly Leu Thr Val Glu Val Asp Ala Pro
225     230     235     240
Lys Ser Gln Asp Leu Ala Lys Ile Met Ala Asp Ile Arg Ala Gln Tyr
245     250     255
Asp Glu Leu Ala Arg Lys Asn Arg Glu Leu Asp Lys Tyr Trp Ser
260     265     270
Gln Gln Ile Glu Glu Ser Thr Thr Val Val Thr Thr Gln Ser Ala Glu
275     280     285
Val Gly Ala Ala Glu Thr Thr Leu Thr Glu Leu Arg Arg Thr Val Gln
290     295     300
Ser Leu Glu Ile Asp Leu Asp Ser Met Arg Asn Leu Lys Ala Ser Leu
305     310     315     320
Glu Asn Ser Leu Arg Glu Val Glu Ala Arg Tyr Ala Leu Gln Met Glu
325     330     335
Gln Leu Asn Gly Ile Leu Leu His Leu Glu Ser Glu Leu Ala Gln Thr
340     345     350
Arg Ala Glu Gly Gln Arg Gln Ala Gln Glu Tyr Glu Ala Leu Leu Asn
355     360     365
Ile Lys Val Lys Leu Glu Ala Glu Ile Ala Thr Tyr Arg Arg Leu Leu
370     375     380
Glu Asp Gly Glu Asp Phe Asn Leu Gly Asp Ala Leu Asp Ser Ser Asn
385     390     395     400
Ser Met Gln Thr Ile Gln Lys Thr Thr Thr Arg Arg Ile Val Asp Gly
405     410     415
Lys Val Val Ser Glu Thr Asn Asp Thr Lys Val Leu Arg His
420     425     430

```

<210> 468

<211> 392

<212> PRT

<213> Homo sapiens

<400> 468

Met Val Ala Arg Val Gly Leu Leu Leu Arg Ala Leu Gln Leu Leu Leu
 1 5 10 15
 Trp Gly His Leu Asp Ala Gln Pro Ala Glu Arg Gly Gly Gln Glu Leu
 20 25 30
 Arg Lys Glu Ala Glu Ala Phe Leu Glu Lys Tyr Gly Tyr Leu Asn Glu
 35 40 45
 Gln Val Pro Lys Ala Pro Thr Ser Thr Arg Phe Ser Asp Ala Ile Arg
 50 55 60
 Ala Phe Gln Trp Val Ser Gln Leu Pro Val Ser Gly Val Leu Asp Arg
 65 70 75 80
 Ala Thr Leu Arg Gln Met Thr Arg Pro Arg Cys Gly Val Thr Asp Thr
 85 90 95
 Asn Ser Tyr Ala Ala Trp Ala Glu Arg Ile Ser Asp Leu Phe Ala Arg
 100 105 110
 His Arg Thr Lys Met Arg Arg Lys Lys Arg Phe Ala Lys Gln Gly Asn
 115 120 125
 Lys Trp Tyr Lys Gln His Leu Ser Tyr Arg Leu Val Asn Trp Pro Glu
 130 135 140
 His Leu Pro Glu Pro Ala Val Arg Gly Ala Val Arg Ala Ala Phe Gln
 145 150 155 160
 Leu Trp Ser Asn Val Ser Ala Leu Glu Phe Trp Glu Ala Pro Ala Thr
 165 170 175
 Gly Pro Ala Asp Ile Arg Leu Thr Phe Phe Gln Gly Asp His Asn Asp
 180 185 190
 Gly Leu Gly Asn Ala Phe Asp Gly Pro Gly Gly Ala Leu Ala His Ala
 195 200 205
 Phe Leu Pro Arg Arg Gly Glu Ala His Phe Asp Gln Asp Glu Arg Trp
 210 215 220
 Ser Leu Ser Arg Arg Arg Gly Arg Asn Leu Phe Val Val Leu Ala His
 225 230 235 240
 Glu Ile Gly His Thr Leu Gly Leu Thr His Ser Pro Ala Pro Arg Ala
 245 250 255
 Leu Met Ala Pro Tyr Tyr Lys Arg Leu Gly Arg Asp Ala Leu Leu Ser
 260 265 270
 Trp Asp Asp Val Leu Ala Val Gln Ser Leu Tyr Gly Lys Pro Leu Gly
 275 280 285
 Gly Ser Val Ala Val Gln Leu Pro Gly Lys Leu Phe Thr Asp Phe Glu
 290 295 300
 Thr Trp Asp Ser Tyr Ser Pro Gln Gly Arg Arg Pro Glu Thr Gln Gly
 305 310 315 320
 Pro Lys Tyr Cys His Ser Ser Phe Asp Ala Ile Thr Val Asp Arg Gln
 325 330 335
 Gln Gln Leu Tyr Ile Phe Lys Gly Ser His Phe Trp Glu Val Ala Ala
 340 345 350
 Asp Gly Asn Val Ser Glu Pro Arg Pro Leu Gln Glu Arg Trp Val Gly
 355 360 365
 Leu Pro Pro Asn Ile Glu Ala Ala Val Ser Leu Asn Asp Gly Asp
 370 375 380
 Phe Tyr Phe Phe Lys Val Gln Ser
 385 390

<210> 469

<211> 851

<212> PRT

<213> Homo sapiens

<400> 469

```

Met Ala Gln Trp Glu Met Leu Gln Asn Leu Asp Ser Pro Phe Gln Asp
1      5      10      15
Gln Leu His Gln Leu Tyr Ser His Ser Leu Leu Pro Val Asp Ile Arg
20      25      30
Gln Tyr Leu Ala Val Trp Ile Glu Asp Gln Asn Trp Gln Glu Ala Ala
35      40      45
Leu Gly Ser Asp Asp Ser Lys Ala Thr Met Leu Phe Phe His Phe Leu
50      55      60
Asp Gln Leu Asn Tyr Glu Cys Gly Arg Cys Ser Gln Asp Pro Glu Ser
65      70      75      80
Leu Leu Leu Gln His Asn Leu Arg Lys Phe Cys Arg Asp Ile Gln Pro
85      90      95
Phe Ser Gln Asp Pro Thr Gln Leu Ala Glu Met Ile Phe Asn Leu Leu
100     105     110
Leu Glu Glu Lys Arg Ile Leu Ile Gln Ala Gln Arg Ala Gln Leu Glu
115     120     125
Gln Gly Glu Pro Val Leu Glu Thr Pro Val Glu Ser Gln Gln His Glu
130     135     140
Ile Glu Ser Arg Ile Leu Asp Leu Arg Ala Met Met Glu Lys Leu Val
145     150     155     160
Lys Ser Ile Ser Gln Leu Lys Asp Gln Gln Asp Val Phe Cys Phe Arg
165     170     175
Tyr Lys Ile Gln Ala Lys Gly Lys Thr Pro Ser Leu Asp Pro His Gln
180     185     190
Thr Lys Glu Gln Lys Ile Leu Gln Glu Thr Leu Asn Glu Leu Asp Lys
195     200     205
Arg Arg Lys Glu Val Leu Asp Ala Ser Lys Ala Leu Leu Gly Arg Leu
210     215     220
Thr Thr Leu Ile Glu Leu Leu Leu Pro Lys Leu Glu Glu Trp Lys Ala
225     230     235     240
Gln Gln Gln Lys Ala Cys Ile Arg Ala Pro Ile Asp His Gly Leu Glu
245     250     255
Gln Leu Glu Thr Trp Phe Thr Ala Gly Ala Lys Leu Leu Phe His Leu
260     265     270
Arg Gln Leu Leu Lys Glu Leu Lys Gly Leu Ser Cys Leu Val Ser Tyr
275     280     285
Gln Asp Asp Pro Leu Thr Lys Gly Val Asp Leu Arg Asn Ala Gln Val
290     295     300
Thr Glu Leu Leu Gln Arg Leu Leu His Arg Ala Phe Val Val Glu Thr
305     310     315     320
Gln Pro Cys Met Pro Gln Thr Pro His Arg Pro Leu Ile Leu Lys Thr
325     330     335
Gly Ser Lys Phe Thr Val Arg Thr Arg Leu Leu Val Arg Leu Gln Glu
340     345     350
Gly Asn Glu Ser Leu Thr Val Glu Val Ser Ile Asp Arg Asn Pro Pro
355     360     365
Gln Leu Gln Gly Phe Arg Lys Phe Asn Ile Leu Thr Ser Asn Gln Lys
370     375     380
Thr Leu Thr Pro Glu Lys Gly Gln Ser Gln Gly Leu Ile Trp Asp Phe
385     390     395     400
Gly Tyr Leu Thr Leu Val Glu Gln Arg Ser Gly Gly Ser Gly Lys Gly
405     410     415
Ser Asn Lys Gly Pro Leu Gly Val Thr Glu Glu Leu His Ile Ile Ser
420     425     430
Phe Thr Val Lys Tyr Thr Tyr Gln Gly Leu Lys Gln Glu Leu Lys Thr
435     440     445
Asp Thr Leu Pro Val Val Ile Ser Asn Met Asn Gln Leu Ser Ile
450     455     460
Ala Trp Ala Ser Val Leu Trp Phe Asn Leu Leu Ser Pro Asn Leu Gln
465     470     475     480
Asn Gln Gln Phe Phe Ser Asn Pro Pro Lys Ala Pro Trp Ser Leu Leu
485     490     495
Gly Pro Ala Leu Ser Trp Gln Phe Ser Ser Tyr Val Gly Arg Gly Leu
500     505     510

```

Asn Ser Asp Gln Leu Ser Met Leu Arg Asn Lys Leu Phe Gly Gln Asn
 515 520 525
 Cys Arg Thr Glu Asp Pro Leu Leu Ser Trp Ala Asp Phe Thr Lys Arg
 530 535 540
 Glu Ser Pro Pro Gly Lys Leu Pro Phe Trp Thr Trp Leu Asp Lys Ile
 545 550 555 560
 Leu Glu Leu Val His Asp His Leu Lys Asp Leu Trp Asn Asp Gly Arg
 565 570 575
 Ile Met Gly Phe Val Ser Arg Ser Gln Glu Arg Arg Leu Leu Lys Lys
 580 585 590
 Thr Met Ser Gly Thr Phe Leu Leu Arg Phe Ser Glu Ser Ser Glu Gly
 595 600 605
 Gly Ile Thr Cys Ser Trp Val Glu His Gln Asp Asp Asp Lys Val Leu
 610 615 620
 Ile Tyr Ser Val Gln Pro Tyr Thr Lys Glu Val Leu Gln Ser Leu Pro
 625 630 635 640
 Leu Thr Glu Ile Ile Arg His Tyr Gln Leu Leu Thr Glu Glu Asn Ile
 645 650 655
 Pro Glu Asn Pro Leu Arg Phe Leu Tyr Pro Arg Ile Pro Arg Asp Glu
 660 665 670
 Ala Phe Gly Cys Tyr Tyr Gln Glu Lys Val Asn Leu Gln Glu Arg Arg
 675 680 685
 Lys Tyr Leu Lys His Arg Leu Ile Val Val Ser Asn Arg Gln Val Asp
 690 695 700
 Glu Leu Gln Gln Pro Leu Glu Leu Lys Pro Glu Pro Glu Leu Glu Ser
 705 710 715 720
 Leu Glu Leu Glu Leu Gly Leu Val Pro Glu Pro Glu Leu Ser Leu Asp
 725 730 735
 Leu Glu Pro Leu Leu Lys Ala Gly Leu Asp Leu Gly Pro Glu Leu Glu
 740 745 750
 Ser Val Leu Glu Ser Thr Leu Glu Pro Val Ile Glu Pro Thr Leu Cys
 755 760 765
 Met Val Ser Gln Thr Val Pro Glu Pro Asp Gln Gly Pro Val Ser Gln
 770 775 780
 Pro Val Pro Glu Pro Asp Leu Pro Cys Asp Leu Arg His Leu Asn Thr
 785 790 795 800
 Glu Pro Met Glu Ile Phe Arg Asn Cys Val Lys Ile Glu Glu Ile Met
 805 810 815
 Pro Asn Gly Asp Pro Leu Leu Ala Gly Gln Asn Thr Val Asp Glu Val
 820 825 830
 Tyr Val Ser Arg Pro Ser His Phe Tyr Thr Asp Gly Pro Leu Met Pro
 835 840 845
 Ser Asp Phe
 850

<210> 470

<211> 335

<212> PRT

<213> Homo sapiens

<400> 470

Met Gly Lys Val Lys Val Gly Val Asn Gly Phe Gly Arg Ile Gly Arg
 1 5 10 15
 Leu Val Thr Arg Ala Ala Phe Asn Ser Gly Lys Val Asp Ile Val Ala
 20 25 30
 Ile Asn Asp Pro Phe Ile Asp Leu Asn Tyr Met Val Tyr Met Phe Gln
 35 40 45
 Tyr Asp Ser Thr His Gly Lys Phe His Gly Thr Val Lys Ala Glu Asn
 50 55 60
 Gly Lys Leu Val Ile Asn Gly Asn Pro Ile Thr Ile Phe Gln Glu Arg
 65 70 75 80

- 279 -

Asp Pro Ser Lys Ile Lys Trp Gly Asp Ala Gly Ala Glu Tyr Val Val
 85 90 95
 Glu Ser Thr Gly Val Phe Thr Thr Met Glu Lys Ala Gly Ala His Leu
 100 105 110
 Gln Gly Gly Ala Lys Arg Val Ile Ile Ser Ala Pro Ser Ala Asp Ala
 115 120 125
 Pro Met Phe Val Met Gly Val Asn His Glu Lys Tyr Asp Asn Ser Leu
 130 135 140
 Lys Ile Ile Ser Asn Ala Ser Cys Thr Thr Asn Cys Leu Ala Pro Leu
 145 150 155 160
 Ala Lys Val Ile His Asp Asn Phe Gly Ile Val Glu Gly Leu Met Thr
 165 170 175
 Thr Val His Ala Ile Thr Ala Thr Gln Lys Thr Val Asp Gly Pro Ser
 180 185 190
 Gly Lys Leu Trp Arg Asp Gly Arg Gly Ala Leu Gln Asn Ile Ile Pro
 195 200 205
 Ala Ser Thr Gly Ala Ala Lys Ala Val Gly Lys Val Ile Pro Glu Leu
 210 215 220
 Asn Gly Lys Leu Thr Gly Met Ala Phe Arg Val Pro Thr Ala Asn Val
 225 230 235 240
 Ser Val Val Asp Leu Thr Cys Arg Leu Glu Lys Pro Ala Lys Tyr Asp
 245 250 255
 Asp Ile Lys Lys Val Val Lys Gln Ala Ser Glu Gly Pro Leu Lys Gly
 260 265 270
 Ile Leu Gly Tyr Thr Glu His Gln Val Val Ser Ser Asp Phe Asn Ser
 275 280 285
 Asp Thr His Ser Ser Thr Phe Asp Ala Gly Ala Gly Ile Ala Leu Asn
 290 295 300
 Asp His Phe Val Lys Leu Ile Ser Trp Tyr Asp Asn Glu Phe Gly Tyr
 305 310 315 320
 Ser Asn Arg Val Val Asp Leu Met Ala His Met Ala Ser Lys Glu
 325 330 335

<210> 471

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> NAP4 Probe

<400> 471

tccgcctcag tcgcctcttt cg

<210> 472

22

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> NAP4 FOR PRIMER

<400> 472

tcggaagggc tccttcaaa

<210> 473

19

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> NAP4 REV PRIMER

<400> 473

caccgttgca gctcttggt

19

<210> 474

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> MRLP45 Probe

<400> 474

ctccattcc cctcatgcta taaaaagaac tacc

34

<210> 475

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> MRLP45 FOR PRIMER

<400> 475

ggctgctgga agctttgaag

20

<210> 476

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> MRLP45 REV PRIMER

<400> 476

tgagcaggat gggagagaac a

21

<210> 477

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> TCF2 Probe

<400> 477

caaaagctgg ccatggacgc ct

22

<210> 478

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> TCF2 FOR PRIMER

<400> 478

gcaggaagga ggaggcattc

20

<210> 479

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> TCF2 REV PRIMER

<400> 479

caggctgtga gtctggttgg a

21

<210> 480

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> ROK1 Probe

<400> 480

cagctggcctt ccattttcct ggcct

25

<210> 481

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> ROK1 FOR PRIMER

<400> 481

tggcaaaact gggttcagag a

21

<210> 482

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> ROK1 REV PRIMER

<400> 482

tcggaccttg tgggatgtg

<210> 483

19

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT1 Probe

<400> 483

ccgccgccta atatgcaaca ttaggg

<210> 484

26

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT1 FOR PRIMER

<400> 484

cgagtattcc aaagctggta tcg

<210> 485

23

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT1 REV PRIMER

<400> 485

atcacagaga gatggccctt atct

<210> 486

24

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT5 Probe

<400> 486

ccgccgccta atatgcaaca ttaggg

26

<210> 487

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT5 FOR PRIMER

<400> 487

cgagtattcc aaagctggta tcg

23

<210> 488

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT5 REV PRIMER

<400> 488

atcacagaga gatggccctt atct

24

<210> 489

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT8 Probe

<400> 489

ccgccgccta atatgcaaca ttaggg

26

<210> 490

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT8 FOR PRIMER

<400> 490
cgagtattcc aaagctggta tcg 23
<210> 491

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT8 REV PRIMER
<400> 491
atcacagaga gatggccctt atct 24
<210> 492

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT9 Probe
<400> 492
ccgccgccta atatgcaaca ttaggg 26
<210> 493

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT9 FOR PRIMER
<400> 493
cgagtattcc aaagctggta tcg 23
<210> 494

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT9 REV PRIMER
<400> 494
atcacagaga gatggccctt atct 24
<210> 495

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT10-2 Probe

<400> 495

ccgccgccta atatgcaaca ttaggg

26

<210> 496

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT10-2 FOR PRIMER

<400> 496

cgagtattcc aaagctggta tcg

23

<210> 497

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT10-2 REV PRIMER

<400> 497

atcacagaga gatggccctt atct

24

<210> 498

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT14 Probe

<400> 498

ccgccgccta atatgcaaca ttaggg

26

<210> 499

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT14 FOR PRIMER

<400> 499

cgagtattcc aaagctggta tcg

23

<210> 500

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT14 REV PRIMER

<400> 500

atcacagaga gatggccctt atct

24

<210> 501

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT18 Probe

<400> 501

cgcgcgccta atatgcaaca ttaggg

26

<210> 502

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT18 FOR PRIMER

<400> 502

cgagtattcc aaagctggta tcg

23

<210> 503

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT18 REV PRIMER

<400> 503

atcacagaga gatggccctt atct

24

<210> 504

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT19 Probe

<400> 504

ccgccgccta atatgcaaca ttaggg

26

<210> 505

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT19 FOR PRIMER

<400> 505

cgagtattcc aaagctggta tcg

23

<210> 506

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT19 REV PRIMER

<400> 506

atcacagaga gatggccctt atct

24

<210> 507

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT6a/b Probe

<400> 507

ccgccgccta atatgcaaca ttaggg

26

<210> 508

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT6a/b FOR PRIMER

<400> 508

cgagtattcc aaagctggta tcg

23

<210> 509

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT6a/b REV PRIMER

<400> 509

atcacagaga gatggccctt atct

24

<210> 510

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT20 Probe

<400> 510

tggcgggaat cctatttatc agactctgta attga

35

<210> 511

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> KRT20 FOR PRIMER

<400> 511

gcaagaaatc agccataaga aagc

24

<210> 512

<211> 24

<212> DNA

<213> Artificial Sequence

<400> 512

ttgcagctcc tctgagtaaa acat

24